THE FAR EASTERN REVIEW

COMMERCE :-: ENGINEERING :-: FINANCE

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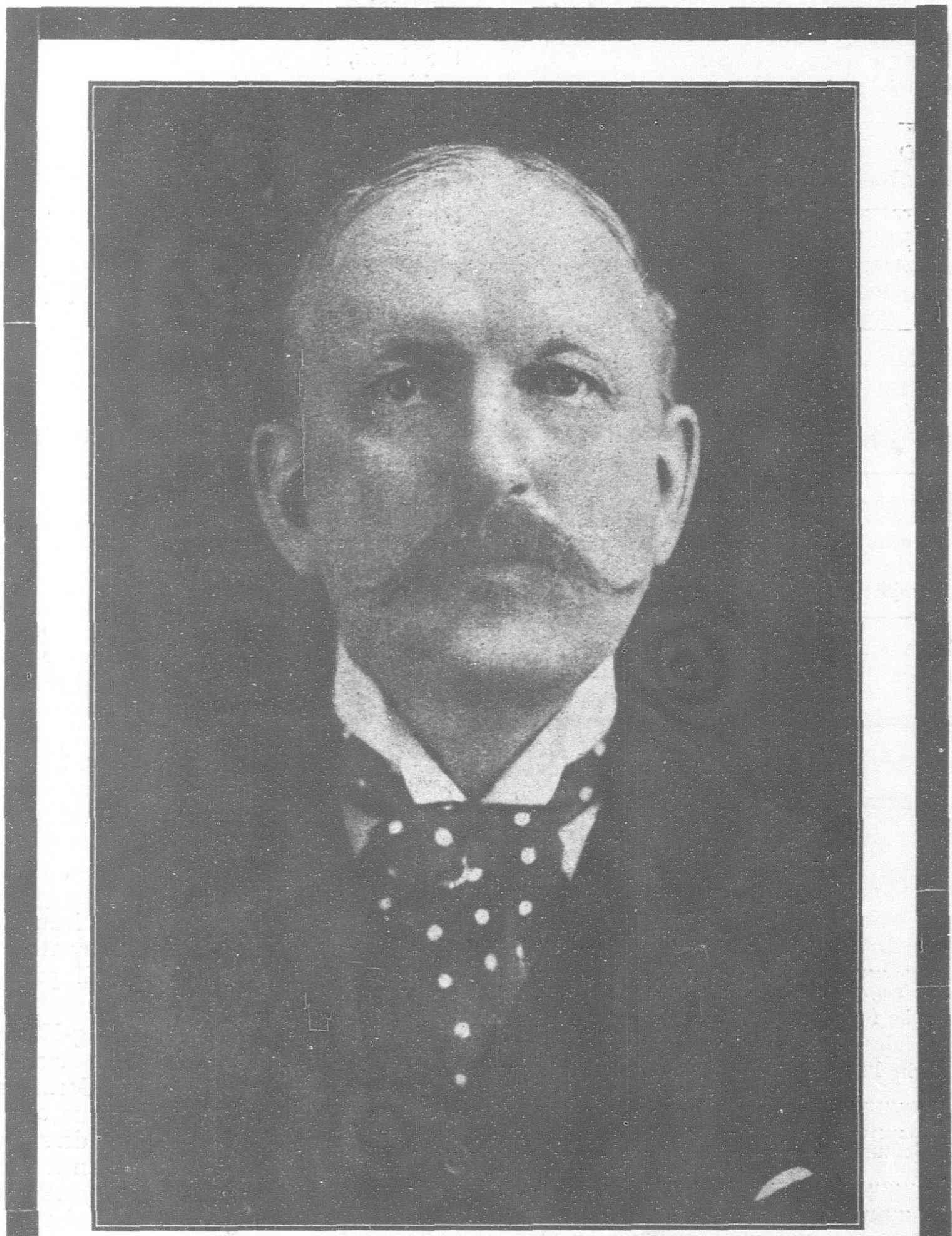
"WITH PATIENCE, FORBEARANCE AND HOPE"



THE LATE ADVISER TO PRESIDENT YUAN

WILLIAM WOODVILLE ROCKHILL

"I agree with President Eliot in thinking that 'the Western world ought to stand by China with *patience, forbearance, and hope*, while she struggles with her tremendous social, industrial, and political problems.'"

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FINANCE IN CHINA

BY GEO. BRONSON REA

Under the above title, Mr. Srinivas R. Wagel presents to the reading public his thoughts on the ever present and intricate problem confronting the new Republic, in a volume of 490 pages. The author states in his introduction "whether at the time of the change in the Ming dynasty from Nanking to Peking, whether at the time of the usurper at Peking during the interregnum between the Ming and the Manchu dynasties, or even during the first reign of the Manchus, the treasury has been as depleted of funds as it is to-day and has been for the past two years."

Mr. Wagel some years ago published and edited "Capital and Commerce," a weekly journal devoted to trade and finance. Since its failure, he has occupied the position of Financial Editor of the "North-China Daily News," and has had excellent opportunities to compile and write an authoritative work on the loans and finances of China, a work which at least would have served as a reference to those interested in the subject. A perusal of the book, however, discloses that the author is unreliable as to his dates and deductions in several important financial matters, which not only disqualifies him as an authority, but destroys the value of his book for serious reference. With these inaccuracies before us, we have refrained from going deeply into the contents of the various chapters. Mr. Wagel announces that he has three other books on kindred subjects in preparation and in the press, but an author who has such a disregard for dates and facts, cannot expect to be taken seriously. If "Finance in China," is to be accepted as a standard of the forthcoming volumes, we candidly advise the author to wait until he can assimilate facts and adhere to dates before inflicting his thoughts on an unsuspecting public. As a sample of Mr. Wagel's unreliability we cite the following instances:

On page 39, in the chapter on China's indebtedness, appears this statement: "During 1906 the Hongkong Government furnished China with a loan of £1,100,000 for the construction of the Canton-Hankow Railway. Unfortunately most of the amount was wasted, and only a very small portion of the projected line was built."

This is a sample of his knowledge of China's finances. We remember that the £1,100,000 loaned to China by the Hongkong Government was for the purpose of compensating the American Company for the redemption of the concession. It is known as the Canton-Hankow Redemption Loan, and the disposition of the funds was clearly specified in Clause 7. The sum of £700,000 was paid by the Hongkong and Shanghai Bank to the Chinese Minister at Washington for immediate payment to the American Company, and £400,000 was paid to Viceroy Chang at Wuchang on the condition that he furnish evidence from time to time to the British Consul at Hankow, that the funds were being actually expended in re-purchasing the concession. Mr. Wagel not only errs in qualifying the loan as a constcurtion loan, but gratuitously adds that "unfortunately most of the amount was wasted, and only a very small portion of projected line was built."

In referring to the Peking-Hankow Redemption Loan on the same page, Mr. Wagel states: "While the British and French were negotiating, the Germans offered to give the loan themselves in order to have some sort of influence over China. As a matter of fact, it was understood that there should be no German participation in any loan that was raised for the redemption, but to the surprise of everybody, it was learnt that German interests had arranged and signed a loan for £5,000,000 with the Chinese Government. This loan was however cancelled later."

This statement of Mr. Wagel's is proof of his incompetency to handle the subject of finance in China. As a matter of fact, the German Bank never made any advances to the Chinese Government to supply the Peking-Hankow Redemption Loan, recognizing that China was morally obligated to raise the redemption loan in the countries which furnished the original funds. The only object of the redemption loan was to buy out the Belgian rights to participation in the profits and control. In other words the transaction was similar in nature to the surrender for an equitable consideration, of the American rights to the Canton-Hankow concession and its profit sharing clause. The Peking-Hankow Redemption Loan was very harmoniously negotiated by the British and French bankers with the Chinese authorities without the slightest cause for friction. Had Germany concluded a prior redemption loan for this Franco-Belgian line the episode undoubtedly would have assumed international importance. The author confuses the German loan of £3,000,000 signed on March 7, 1909, for construction of the Hukwang lines, which was subsequently cancelled on the protest of the British Government, with the Peking-Hankow Redemption Loan. Such inexcusable flights of fancy are out of place in a serious book for serious people.

On page 421, in his brief account of the Peking-Hankow Railway, the author is again wrong in his dates and deductions. In describing how the concession went to the Belgians, he says, "It was not merely a question of breaking faith with the American Syndicate that was then negotiating with Sheng Kung-pao but it was also breaking faith with Great Britain. On an earlier occasion, with the full knowledge of the Chinese Government, Great Britain and Russia came to an arrangement by which the Yangtsze Valley was to remain the sphere of British influence. Nevertheless the contract with the Franco-Belgian Group was signed and diplomacy triumphed."

The Peking-Hankow Preliminary Agreement was signed on May 27, 1897, and the final Agreement on July 21 of the same year. It was owing to the fact that a Russian Bank was interested in this transaction and also that the Russian Government subsequently opposed the British loan to the Imperial Northern Railways in 1898, that the British Government sought an understanding with the Russian government to define their respective spheres. The Scott-Mouravieff exchange of notes was dated April 28, 1899, or two years after the Peking-Hankow Agreement was signed. Mr. Wagel had the right idea about a breach of faith, but didn't know just where it happened. It certainly could not haveapplied to an understanding signed two years after the Peking-Hankow concession was granted. There was a breach of faith, and any one at all conversant with the history of that period knows that it referred to China's promise to the British Minister that the concession would never receive Imperial sanction if it was found that Russia was in any way interested in it.

In describing the Canton-Hankow Railway, Mr. Wagel says, "When in 1896-1897 American financiers were foiled in their efforts to obtain the concession for the construction of the Peking-Hankow Railway, the American China Development Company was given the concession for constructing this line, *mainly as a sop*." Why a "sop"? Was not any other railway concession at that time a sop to the various Powers to keep them quiet? The American Government used *no* pressure on the Chinese authorities to secure this concession. It was distinctly a business deal, with only the friendly support of the American Legation. The British railway concessions were obtained through severe diplomatic pressure, and a study of the Blue Books of that year disclose that force was to be employed if the British demands were not complied with. The word "sop" used in connection with a legitimate American concession at that time savors strongly of bias.

Mr. Wagel continues: "When the Spanish-American War broke out, the Americans had done very little, although their concession had already had Imperial sanction." Here again the author plays fast and loose with dates and deductions. The preliminary contract for the line was signed at Washington on April 14, 1898, by Mr. Wu Ting-fang. War with Spain was declared on April 22, or eight days afterwards. The Preliminary Agreement provided that surveys should be made at once, and as a result of the survey it was found that additional funds would be required. It speaks well for the energy of the American Company, that the Final Agreement was signed on July 13, of the same year.

How could the Americans be expected to do anything before the Spanish-American War, when the Preliminary Agreement was signed only eight days prior to its outbreak, and the Final Agreement signed only after the war was over, in July? This again implies that the author is not only disqualified to handle the subject, but as his subsequent statement reveals, is animated by a desire to belittle America.

In commenting on the redemption of the line Mr. Wagel remarks: "This Company was only anxious to obtain as much as possible out of the sale of the concession back to the Chinese and just for the 32 miles the Chinese Government had to pay $6,750,000, and thus close a scandal." If the author desired to be fair he could have stated that the $6,750,000 paid to the Company represented an expenditure of $3,000,000 for the 32 miles of completed line between Canton and Samshui and about 50 miles of completed earthwork and construction materials, and $3,750,000 as compensation for the loss of one-fifth of the prospective profits during the 50 year life of the concession. As the action of the American Company in demanding compensation for the loss of prospective profits in a fifty year concession on which they were already well advanced, is invariably held up by interested writers as a scandal or robbery, it is well to remind our readers that other preliminary Agreements entered into by Britain and Germany in 1898, which included a 20 per cent. participation in the profits, on being re-written to meet changed conditions, provided for adequate compensation for the cancellation of the profit sharing clause. China had to pay Britain and Germany Gold $1,000,000 for the cancellation of this clause in the Tientsin-Pukow Railway, and Gold $600,000 in the Pukow-Sinyang line. But these facts are either unknown to the average writer on Chinese railways finance, or deliberately ignored in commenting on the price paid for the surrender of the American rights. If it was a scandal for the Americans to receive compensation for surrendering a profit sharing concession to China, how would the writer qualify the same action in the Tientsin-Pukow and Pukow-Sinyang railways, or the sale of the Peking Syndicate line to China at nearly double its actual cost, or the surrender of the Peking-Hankow profit sharing rights, through the redemption loan for that line. For several years European writers have insisted on denouncing the American transaction as a scandal and robbery, but ignore the facts when the shoe is on the other foot.

A further example of Mr. Wagel's unfitness to pose as an authority on Finance in China, is shown in his remarks on the Tientsin-Pukow Railway loans. Passing by some minor inaccuracies found on page 428, Mr. Wagel says on page 429, "A contract was also made for a supplementary loan of £3,400,000. The loan was not issued, the banks instead supplying the funds, whenever needed, for the construction." Mr. Wagel might be excused for his failure to have an accurate knowledge of events before his arrival in China, but there are no extenuating circumstances to plead for his inability to adhere to facts which must have come under his observation as a financial editor in China during the last four years.

The Tientsin-Pukow Supplementary Loan, signed on September 28, 1910, was for the sum of £4,800,000, instead of £3,400,000 as Mr. Wagel states, and on November 3 of the same year, the first installment of the loan amounting to £3,000,000 was issued simultaneously in London and Berlin. The British share was £1,110,000, and the remainder, £1,890,000, was offered in Berlin. The second installment of the Supplementary Loan was never issued, the Banks advancing the funds themselves against the prospective issue. Such disregard for facts destroys the value of the book.

Mr. Wagel further on makes the usual slighting reference to Dr. Sun Yat-sen's railway program in the following words: "It is useless to refer in detail to Dr. Sun Yat-sen's schemes: his schemes were neither practicable, nor, as later events proved, was it his intention to go on with the development of railways." In a preceding chapter, the author takes occasion to give another gratuitous fling at Dr. Sun by saying: "Very little was done however, by Dr. Sun Yat-sen, who was appointed Railway Commissioner for all China, at a princely salary, as soon as he resigned his temporary office as President of the country: and since he has been actively engaged in political work, it is very doubtful if he did anything in the way of promoting railways at all."

These are matters which the author is entirely ignorant of, and his aspersions on Dr. Sun are unwarranted. Dr. Sun's revised railway scheme was not only entirely practicable and feasible, but met with the indorsement and approval of every financier in Europe and America to whom it was shown. Mr. Wagel's book will go out to the public with the stamp of approval of the "North China Daily News," the leading exponent of British opinion in the Far East, and will be quoted as an authority by those who have sublime faith in the infallibility of its Financial Editor. As his ideas will be generally accepted by other editors throughout the East, the following information about Dr. Sun Yat-sen's railway scheme will be illuminating, and we trust that in a spirit of fair play these facts will be given the same publicity as the many condemnations of his scheme.

DR. SUN YAT-SEN'S RAILWAY PROGRAMME

A DEFENCE

BY GEO. BRONSON REA.

When Dr. Sun Yat-sen was empowered in September, 1912, by President Yuan Shih-Kai to organize a national corporation or company for the financing and construction of future railways in China, wide spread publicity was given to his ideas, through the medium of several speeches whereby Dr. Sun hoped to awaken his countrymen to a full realization of what railways meant to the future prosperity and development of the country. At that period Dr. Sun held the view that it would be well nigh impossible to arouse enthusiasm amongst the people, by advocating the construction of a few thousand miles of trunk lines such as any tyro familiar with the needs of China could outline, so he deliberately traced on a large map an elaborate, comprehensive scheme embracing 60,000 miles of railways to illustrate his idea of what China actually required to take her place abreast of other countries where modern transportation had reached its highest development. Dr. Sun's so-called dream was nothing more or less than a prophetic vision of the lines which in the next fifty years China will be compelled to construct. His mistake consisted in giving publicity to his ideas without a full explanation of what he had in mind. These with his rather vague fancies of financing the lines, and the length of time they would take to construct, were outlined in various speeches for the benefit of Chinese audiences, and were given world-wide publicity through the foreign press associations. That foreign public opinion should unanimously agree in stamping him as a visionary and his scheme as impracticable was a foregone conclusion. The world smiled and refused to take him seriously. A mistake was undoubtedly committed in making no effort to counteract the prevailing idea at that time, but to do so would have necessitated the publication of important details, which might have brought about immediate failure of his plans owing to the delicate international political questions involved and the monopoly held by the Official Groups for railway loans to China. Since the time of his speeches in Northern China in September, 1912, the public has received no official or accurate information concerning the work of the Chinese National Railway Corporation, and the opinion then formed from Dr. Sun's incomplete exposition of his ideas for Chinese consumption, has for various good reasons been permitted to prevail without any attempt at correction.

When Dr. Sun arrived in Shanghai from Peking to put his plans into operation one of his first acts was to enlist the services of a competent adviser. There were several highly qualified British and European railway experts who aspired to the position, but Dr. Sun inclined to the belief that in the preliminary work of his organization he required the aid of one who had an intelligent grasp on the political problems connected with Chinese railways rather than a trained and experienced technical railway expert. He held that he needed some one who had a thorough knowledge of the trade routes and topography of the country, and whose advice would guide him aright in devising his final scheme, by steering him through the maze of international political pitfalls created by the many treaties, conventions and loan agreements through which China had parted with her rights. It was his earnest desire that his final program would be in strict accordance with rights already ceded to other parties, so that no international obstacles could be placed in the way of its success. He knew that his original scheme if officially presented to the world would embarass and compromise the President and the new Government, and he was animated by the most loyal and patriotic motives in trying to avoid any complications.

Passing over the high qualifications and merits of several well known foreign railway experts, Dr. Sun after consultation with many prominent Chinese invited me to join him as his adviser on these preliminary matters. I pointed out to Dr. Sun that I was not a railway engineer, and had no experience in the construction and operation of railways, and that my only qualification for such an honor was my knowledge of international politics as expressed in concessions and intrigues for control of China's railways. I warned Dr. Sun that my appointment would be adversely criticized by others having a more practical experience in the construction of Chinese railways. I therefore suggested that the title of Technical Secretary would be more in accord with the nature of the duties of the position, instead of the word adviser, which had lost considerable of its significance in China. This would leave the door open in the future for the employment of a proper technical expert as Adviser to the Company.

On assuming the position of Technical Secretary of the Chinese National Railway Corporation, Dr. Sun confided the revision of his original unwieldy railway scheme into my hands, and at my suggestion no authoritative information concerning the plans of the Corporation was allowed to leak out to the public from that date; the only parties entitled to such information being the higher officials of the Government at Peking. A comprehensive scheme for the construction of 10,000 miles of essential trunk lines was then designed, to be financed and constructed over a period of ten to fifteen years, calling for the expenditure of £100,000,000 or at the rate of £6,666,666 per year, a perfectly feasible and practical scheme for the financial markets of the world to assimilate.

As Dr. Sun found it impossible to leave China at that time to initiate negotiations for the financing of the lines, he requested me to undertake this mission and pave the way for him to come to Europe later on, and ratify and sign the final contracts. In order to successfully enter into negotiations, Dr. Sun appointed me as his Deputy, with a full power-of-attorney to act for him and the Corporation in arranging preliminary financial terms for the construction of the proposed system. It was left entirely to my discretion as to whether the scheme should be offered as a whole to an international combination of independent capitalists, to the Official Banking Groups, or whether it should be disintegrated, and separate contracts entered into for each line. The scheme as presented to the leading financiers in England, France and America met with their unqualified approval, and in France and America it was indorsed by members of the Official Banking Groups as the most practical plan yet presented for the solution of the intricate Chinese railway problem. The scheme could have easily been financed in its entirety, as negotiations could have been opened and preliminary agreements signed so that China would have been obligated to their final acceptance. Owing to certain political complications and the attitude of one of the official institutions who refused to relinquish certain perquisites connected with the departmental system of construction, I decided that another plan should be carried out in China by inviting the great construction firms to enter the field, feeling confident that with their experience and organization, they could build the railways more economically and expeditiously than individual engineers nominated by the Banks under the prevailing departmental system, where the Banks are the principals to the contract.

With this idea in view a contract was arranged with the greatest firm of railway constructors in the world, a firm who had already built thousands of miles of lines in other countries, whose credit and reputation for honest work was such that the building of all the Rhodesian lines had been entrusted to their care by the Rhodesian Government on a percentage basis without competition. The terms arranged with Messrs. Pauling & Company of London were most equitable and honorable to both sides, in fact, they are universally recognized by all disinterested financiers and engineers, as the most favorable financial and construction terms ever accorded to any Government for work of this nature. So favorable were they that I have been criticized by my intimate friends in other large financial and engineering firms for permitting such a precedent to be established, on the grounds that China was not entitled to such special consideration when all other Governments recognized a higher rate of profit to the contractor. I may go further and state that it is almost impossible to duplicate the terms in any future contract. The agreement with Messrs. Pauling & Company created an entirely new precedent for the construction of railways in China, and liberated the Chinese Government from the usual terms of the departmental system, by opening the door to an experienced railway construction firm who up to that time had been debarred from operating in China by the enforcement of the monopoly accorded the official banking groups for business of this nature.

All other Governments in the world are now carrying on important construction works on a percentage basis with reputable engineering firms, in fact under certain given conditions a percentage or cost plus a fixed sum contract is the only feasible method to get the work financed and started. The system has been found good for the most enlightened Governments in the world, and from my own knowledge and experience as a contracting engineer for public and other works, I had no hesitation in assuming the responsibility for employing it in the construction of Chinese railways, especially as no survey had been made or could be made with in the time and funds at the disposal of the Corporation.

Whether I was right or wrong in this decision is purely a matter of opinion. My judgment on this point is as good as that of any railway engineer in China, and I have the experience of other Governments to justify my action. The only opposition to its adoption in China arises from interested and prejudiced parties who prefer to fasten the departmental system on a weak Government, so certain practices and perquisites can be perpetuated. The essentials to the faithful performance of a percentage contract are an honest and experienced contractor of high financial standing, and honest supervision on the part of those appointed to protect the Government's interests. Given a reliable, honorable and competent contractor with an established reputation, and an honest official to guard the interests of the Government, the percentage or cost plus a fixed sum contract are the most equitable manner of carrying on large public works where it is impossible to make an accurate estimate at the time of entering into the contract. If the Government objects to such a contract, it simply indicates distrust in the integrity of its own officials, and merely adds further ammunition for bankers to insist on more stringent terms in supervising the expenditure of loan funds. "Cost plus a fixed sum" is undoubtedly the best arrangement, but with honorable contractors and faithful inspectors representing the other side, the percentage system is as equitable in the end. The legitimate, recognized percentage of profit allowed by all European and American Governments on large public works is invariably ten per cent. over the actual cost of construction. I can cite several such contracts being actually carried out for various Governments throughout the world. Messrs. Pauling & Company were willing to undertake the work in China on a basis of seven per cent. profit over the actual cost of construction, or three per cent. under the standard rate other Governments consider as fair and reasonable. The financial terms were also one half of one per cent. better than the last Chinese railway loan. The Agreement for the Canton-Chungking line speaks for itself. As Dr. Sun could not personally visit London to arrange the details and sign the agreement, at my suggestion it was arranged that Lord French, the representative of Pauling & Company in China, should proceed to Shanghai and negotiate the details directly with Dr. Sun. While these meetings were taking place, other negotiations with well known and experienced contractors and financiers were initiated in London and Paris on the same favorable terms as the contract with Pauling & Company. Being desirous that Dr. Sun should have all the honor and prestige arising from the success of his plans, I refrained from definitely compromising him with other parties until the Pauling contract with all its details was formally signed, so it could serve as a precedent and guide to others. I was also very anxious that Dr. Sun should leave China and come to Europe to conclude the other contracts on the ground, so he could personally reap all the credit and honor that belonged rightfully to him as head of the Corporation and originator of the scheme. My one regret is that I permitted the transfer of the Pauling negotiations from London to Shanghai instead of urging Dr. Sun to come to London, as then he would never been have actively inplicated in the rebellion which destroyed his usefulness. The contract for the financing and construction of the Canton-Chungking Railway was signed at Shanghai on July 4th, 1913 between Lord ffrench and Dr. Sun, or within a month after Lord ffrench arrived in Shanghai from Peking. Copies of the contract were due to arrive in London by the Siberian mail on the 20th of July, when active negotiations could proceed with the other parties who had already accepted the basic terms. On the 18th of July, the rebellion against President Yuan was commenced, and two days later Dr. Sun's powers as Director General of the Chinese National Railway Corporation were annulled by the President in a special mandate, thus bringing to an abrupt termination all further negotiations in Europe.

From that time to this not one word about Dr. Sun or his railway plans has been conveyed to the public by any one formerly connected with him, nor has the Government itself made any public statement. This silence is due to the fact that absolutely nothing was known about what had been accomplished. Dr. Sun's papers and records were removed from his office before his flight to Japan, and his Chinese assistants and staff have been deterred from saying anything in defense of his railway scheme for fear of being misinterpreted and implicated in the abortive rebellion against the President. If the Government knew anything about his railway plans it very wisely refrained from making public any information that might reflect credit on a man proscribed as a political outlaw. Of Dr. Sun's political schemes and dreams, I know nothing. I do know however that during my connection with him as the Technical Secretary or Adviser to the Chinese National Railway Corporation, and as the Deputy Director General holding his Power of Attorney, nothing but the highest and most honorable patriotic motives and complete devotion to the best interests of his country characterized his labors for the perfection of a practical railway scheme for China. Up to the time of my departure from China on the special mission, Dr. Sun would listen to no criticism of the President from his subordinates in the Corporation. He trusted him implicitly, and I personally know that when appealed to from all parts of the country to permit his name to be used as a candidate for the Presidency in the coming elections, Dr. Sun worked in his home until early morning hours writing letters to his friends and adherents advising them to support Yuan Shih-kai for the Presidency. Dr. Sun's parting and private instructions to me were emphatic in that he did not desire one cent set aside as commission for himself or the Corporation in any negotiations I might initiate. He desired that the lowest possible terms should be secured for the country, and he confided in my honor and integrity to protect his reputation from any taint or suspicion of graft or illegal commissions. In other words he placed his reputation in my keeping.

As I have already remarked I know absolutely nothing of Dr. Sun's political plans. I was never taken into his confidence on these matters, nor did I ever discuss politics with him. I questioned him once on the stories about his relations with the President, and he assured me that he had the highest confidence in President Yuan and that the most cordial relations existed between them. And at that time this was true. Once only did I venture to intrude my ideas and advise him on Chinese political matters. In a letter written from London I urged him to lay aside all party differences, and go to Peking and co-operate with President Yuan by accepting the position of

Premier or any cabinet post, where he could control the Kuo Ming Tang element of Parliament who were obstructing the organization of the Government and compelling the President to take the reins in his own hands as the only way to extricate the country from its critical position. I pointed out that such a step on his part would harmoniously unite North and South, restore confidence and contribute to the rapid reconstruction of the country. The practical experience he would gain in active administrative and legislative work in Peking would strengthen his position and grasp on public affairs, and pave the way to greater usefulness in the future. I have since learned that Dr. Sun approved of my advice and decided to act on it. At a secret political meeting this matter was fully discussed and received the indorsement of most of the leaders present. I am informed however that one of the members in a passionate tirade against the President, obstinately opposed such a step and Dr. Sun's good resolutions were voted down on purely party grounds.

As to Dr. Sun's railway scheme I was fully informed, for whatever plans he had, and whatever was done to further them, had been outlined and carried out by myself. I am responsible for his scheme, and the financial negotiations in London, Paris and New York. My personal work along these lines reflected on him as my principal, and his personal reputation as an honorable official depended on my integrity. From the time I left Shanghai in January, 1913, until his powers were annulled on July 18th, Dr. Sun confided the preliminary negotiations to my discretion, and never once during this time did he write me a letter of instruction or hamper my freedom of action with any suggestions, or question the wisdom of my plans. He was guided entirely by my few cablegrams and acted promptly and in accordance with all my recommendations. In other words Dr. Sun placed the utmost confidence in my ability and integrity, and stood to succeed or fail on my judgment and the outcome of my mission abroad. I would point out that with one single exception, where Dr. Sun signed an agreement on the eve of his flight from Shanghai at the time of the rebellion, there were no compromises or complications left for the Central Government to assume. The Canton-Chungking Railway Agreement was signed while Dr. Sun was in full possession of his powers, and was therefore valid and legal, and recognized as such by the British and Chinese Governments. When his powers were annulled, the other negotiations initiated in London and Paris were amicably terminated, with a clear mind and clean hands and with no fear of future compromises for the Government at Peking or for myself. My work in Europe is open to the fullest investigation and scrutiny. The record is clean and honorable, characterized by a firm defense of China's rights and a recognition of equal opportunity for other nations interested in China.

With this exposition of facts it becomes evident that my personal reputation is involved in any final judgment on Dr. Sun's railway scheme. For the last eighteen months I have been unable to protect myself against hostile criticisms, falsehoods and insinuations directed against Dr. Sun and his railway scheme, owing to the fact that the Ministry of Communications confirmed the appointment I held under Dr. Sun, and entrusted me with further matters connected with the development of railways in China. As this official connection is now terminated I am free to answer any and all attacks and insinuations against Dr. Sun's railway program, and the financial arrangements entrusted to my care.

I hold no brief for Dr. Sun Yat-sen and his political propaganda. I cannot defend his intrigues and open rebellion against the Government, but in the very nature of things I am compelled to take notice of reflections on his railway scheme and the financial negotiations and diplomatic conversations abroad in which I was the principal figure. Dr. Sun may have conducted negotiations with others without my knowledge. Of his negotiations in Japan, I cannot speak with authority. Of all such matters I know nothing, as I never received a letter from him while I was abroad. It is hardly probable however that any serious negotiations could have taken place with reputable financiers, without my hearing of them in Europe. I mention this because it has been insinuated that my mission in Europe was to raise funds for the rebellion through the sale of railway concessions and contracts. The one contract negotiated, speaks for itself. I am willing to be judged by that. The fact that no other compromises resulting from my work have been brought to light in eighteen months is sufficient proof of the absurdity of such stories. If any money had been advanced on a railway contract, the contract would have been forthcoming by this time, and demands made on the Government for its recognition. Such stories are not only a reflection on my own conduct, but imply that there are still gullible financiers ready to part with hard cash on such unbusiness like propositions.

Honest criticism of the scheme itself, or a frank discussion on the advantages or disadvantages of the contract system of construction are legitimate and welcome, as this involves merely a matter of opinion, but malicious, mendacious and at times libellous references to Dr. Sun and myself cannot be permitted to pass unnoticed. If these attacks were inspired by a knowledge of the scheme or what had actually been accomplished, they might be justified in part, but as the authors are absolutely ignorant of many facts, it becomes evident they are acting unjustly in abusing a political refugee who cannot defend himself, and ignore the fact that a foreigner was practically directing the scheme and its financing abroad. I owe it therefore not only to Dr Sun but to myself and other Americans who may be called upon in the future to co-operate with the Chinese, to inform the public of the real facts connected with Dr. Sun Yat-sen's railway scheme and my personal connection with it. To this end I hope in the near future to publish in the columns of THE FAR EASTERN REVIEW and in permanent book form the history of the Chinese National Railway Corporation and its work for the advancement of China's prosperity through the development of railways. I have no intention of wounding the sensibilities of the present Government at Peking, who hold the name of Dr. Sun as anathema. Dr. Sun's political intrigues and his railway schemes were two distinct and separate things. Dr. Sun is open to severe condemnation for permitting himself to be led into open hostility against the Government at a time when the reconstruction of the country, and the consolidation of power was imperative to save China from her enemies, at home and abroad. But after all, Dr. Sun was a Chinese official, placed in control of the greatest single development scheme ever conceived for placing China on her feet. The reputation of one high official reflects on all. If the stories of graft and corruption against Dr. Sun as the head of the Chinese National Railway Corporation are permitted to pass unchallenged, it is not Dr. Sun who will suffer, but the reputation of China itself. If Dr. Sun was honorable and upright in his financial transactions for the construction of railways, the world is entitled to know of it, as it will go a long way towards strengthening confidence in the general integrity of China's officials, and assist the Government in future negotiations. The financiers of Europe and America *know* that Dr. Sun's record was clean in the transactions of the Chinese National Railway Corporation, and it was due to the confidence and trust then created, which permitted the Government to secure immediate attention to a similar scheme when proposed a year later. Because Dr. Sun was weak and allowed himself to be inveigled into a rebellion against the President, does not justify attacks on his railway plans. A political murderer may be an honest man in business matters.

A sample of the unjust attacks on my personal work and character, appeared in a leading editorial in the "Shanghai Mercury" of April 1st last, when I was in London, and could not at the time readily defend myself owing to my official connection with the Ministry of Communications. In an unseemly haste to laud the merits of a British aspirant for the position of Railway Adviser at Peking, the editor of the Mercury could not resist the opportunity of discrediting my personal work, thus laying itself open to prosecution for libel, by the publication of a deliberate falsehood calculated to reflect on the honor and usefulness of myself. The writer of the editorial overreached himself in this particular instance as by its reflections on the Ministry it destroyed the last hope of Mr. Pope's appointment as Railway Adviser. Mr. Pope subsequently apologized to me in London for the editorial and assured me on his honor that he had absolutely nothing to do with its publication. As an interesting side light on the means employed to undermine the reputation and usefulness of an American in the employ of the Chinese Government, the editorial is herewith reprinted:—

> MR. POPE'S APPOINTMENT.
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> We had the pleasure on Monday evening of being the first to announce the transfer of Mr. Pope to Peking, and though it was not then clear to what post he was to be appointed it was quite certain that it would be to some office in which his services would be of even greater and wider importance than they have been during the tenure of his office in Shanghai. The appointment is one to be welcomed from every point of view except that of Shanghai, which will miss his genial presence and his unfailing interest in local and especially philanthropic affairs. As far as the work of the Shanghai-Nanking Railway is concerned it will doubtless be maintained at its present high level by Mr. Clear, who is appointed Mr. Pope's successor, and it may be that Mr. Pope's appointment will enable him to move Peking to absorb a certain further degree of wisdom with regard to the development of the S.N.R. than Peking has been able to assimilate up to the present.
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> Apart from all personal consideration, however, the appointment is a welcome and a healthy sign of the times. In the early days of last December, it will be remembered, the Ministry of Communications published an advertisement which invited all and sundry to compete for a substantial prize of some thousands of dollars. The competitors were to send in within a month a scheme for railways throughout China, with maps and plans, and with full details of gauge, costs, and like matters, reasons why each line should be built, an estimate of the strategic, commercial and other values of each line, and a host of other interesting details. The advertisement made the Board of Communications the laughing-stock of the Far East, and the only sane conclusion that anybody who read it could come to was that either some underling in the Board had gone crazy or that somebody outside the Board was having an expensive joke. **That was the first impression, but within twenty-four hours Peking knew what was the underlying motive and purpose of the apparent folly. It was realized that the requirements of the advertisement could not be met except by somebody already thoroughly well posted up and with practically every detail ready for delivery; it was further realized that the preparation of such material as was required could only be undertaken with access to the fullest information, much of which was only to be found in Government dossiers; and it was not long before Peking grasped the fact that such information had all been carefully compiled and collected and systematized and organized by Dr. Sun's Railway Bureau. The conclusion was obvious: this advertisement had almost certainly been published by the Board of Communications, at the instance of somebody who had been in the employ of Dr. Sun, and had all the required information ready to hand. The short time allowed for the competition would enable some such residuary legatee of Dr. Sun to pass in his papers and secure not only the coveted prize, but also, possibly, the appointment of advisor to the Board of Communications. The appointment of Mr. Pope sets the seal on the final failure of that intrigue, and not only China but all interested in Chinese railway development may well feel thankful at the present announcement. The Board of Communications is most deserving of congratulation, for it has the double joy of knowing that it has secured a good advisor and has also rid itself of a widespread organized attempt to bring it under influences not by any means wholesome.**
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> Mr. Pope's task will not be an easy one. Whilst some of China's railways are doing well, others are doing ill; whilst some are well organized, others are not organized at all. There is little co-operation between them. The prolonged negotiations for through booking between the Shanghai-Nanking Railway, the Tsin-Pu Railway and the Peking-Mukden Railway revealed the dire need of expert and independent advice and guidance in the Board. **The waste of time and energy that have been brought about by bringing an accountant from the United States to examine the various railway accounts in order to decide whether train oil were to be counted against upkeep of wheels or of axles, is another illustration. With a competent advisor in the Board it would have been easily possible to call a conference of, say, the three leading accountants, and these could have drafted a uniform method of accountancy. They would have done it in a little over a week, and at practically no cost to the Board.** These are examples in one direction of how such an appointment as that of Mr. Pope can be made readily effective for China's good. When he turns to other questions a big task lies before him. Half the railways in China are packed with "dead-heads," drawing "dry salary." These are the appointees, not of the managers of the railways, but of Tom, Dick and Harry in the Board of Communications itself. It will be a difficult, but doubtless an agreeable, task for Mr. Pope to get rid of these burdens on the railway development of the country. There are other problems just as serious to be tackled, and no doubt Mr. Pope will tackle them as far as lies in his power.
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> But there is the crux of the matter—"as far as lies in his power." The Board of Communications will simply stultify itself if it does not give Mr. Pope real power and authority, and does not accept his advice. If the Board only wants a figurehead, it might just as well have taken any schemer that came along, because it need not have taken his advice. Knowing Mr. Pope's character, we hope that the Board is cherishing no illusions. Mr. Pope is not likely to allow himself to become a figurehead merely. He will want to get something done; and we hope he will succeed.

The reference to myself is obvious to any one at all conversant with my work and movements. I was in Peking at the time the advertisement mentioned was printed in the native newspapers. The facts surrounding this rather remarkable announcement are still somewhat obscure. I may state that the various schemes submitted a year ago in answer to the advertisement of the Ministry, are still in the hands of an official appointed to pass on their merits, and no awards or decisions have yet been announced. It might interest the editor of the "Mercury" to know that a work in the French language on the "Railways of China," or a "Programme for their Development," was recently published at Peking, by A. J. H. Charignon, Technical Adviser of the Ministry of Communications. I merely mention this to invite the attention of the editor of the "Mercury" to the fact that I have had a similar work in preparation for some months, but have withheld its publication, until official action was taken on the competitive schemes already filed with the Ministry, so it would be possible for me, as the proprietor of The Far Eastern Review, to render due credit to the successful competitor. Does the editor of the "Mercury" desire to be fair and just? Would he care to insinuate that M. Charignon in his capacity as Technical Adviser to the Ministry of Communications with access to the dossiers and the competitive schemes, has forstalled other competitors by publishing a program for the future development of China's railways? It is a fact that I personally submitted a scheme for a national system of railways, with a full exposition of the various lines from the strategic, political and commercial viewpoint, together with over a dozen large maps, but as it was in connection with an entirely different matter, I expressly stipulated that it should be considered as a departmental document, and in no event should it be entered in the public competition. After my resignation from the Ministry of Communications in September last, I was requested by an official of the Ministry to permit my scheme to enter the competition, and I then consented. M. Charignon's is the French Technical Adviser to the Ministry of Communications, and undoubtedly has access to the dossiers the editor of the "Mercury" refers to. The schemes submitted for competition over a year ago have not been passed on as yet, and in all probability never will be. It is certainly a fair question to ask what right had any foreign official of the Ministry to publish a work on a national scheme for the development of railways for China, when various competitive schemes have been in the possession of the Ministry for nearly a year, without action being taken on them. I have no desire to pass any reflection on M. Charignon's work. But, owing to his official position there is a question of ethics involved in the publication of his book, which if violated by an American, would have resulted in his being hounded from the Ministry by ever ready critics who lay awake at nights devising schemes to destroy the usefulness of every American in any Chinese Government position which bars the way to the successful prosecution of other national designs on Chinese railways.

It is only necessary to read the gratuitous and uncalled for slur on Dr. Adams and his work for the Unification of China's Railway Accounts, to grasp the fact that the attack is not a personal one, but part of a general policy to bring discredit on any American who has the presumption to interfere with the well laid plans of others for the domination of China's railway policy. For the Chinese Government to invite the services of the expert who had brought order out of the chaos surrounding American railway accounts, and whose ability is recognized all over the world, and who holds an honorable position on the Interstate Commerce Commission of the United States, rather than entrust this important task to Mr. Pope, was keenly resented by the "Mercury" and the interests it represents. Any American who dares to presume that he has any knowledge of China's railways or interferes with the set plans of others, is a participant in the alleged "*widespread organized attempt to bring Chinese railways under influences not at all wholesome.*" This remark is simply rank impertinence and a cowardly national libel on Americans. However, there is one American who has full and exact information as to the aims and policies of others, and who will take great care in the future to give the widest publicity to all designs on China's liberty of action in the control of her railways.

And now comes Mr. Srinivas R. Wagel, the Financial Editor of the "North-China Daily News," to heap further contumely on Dr. Sun Yat-sen and his railway program. "It is useless to refer in detail to Dr. Sun Yat-sen's schemes," says Mr. Srinivas R. Wagel; "his schemes were neither practicable, nor as later events proved, was it his intention to go on with the development of railways." "Very little was done by Dr. Sun Yat-sen and it is very doubtful if he did anything in the way of promoting railways at all." Just as if Mr. Srinivas R. Wagel knew anything at all about the subject! What he did know was deliberately suppressed and no reference made to the fact that the one contract Dr. Sun did conclude went to the most reputable British railway construction firm.

AMERICAN COMMERCIAL ATTACHE FOR CHINA

MR. JULIAN H. ARNOLD

On July 15th, ult., the American Congress, acting upon the earnest recommendation of the Hon. William C. Redfield, granted an appropriation of $100,000 for "*Commercial Attaches,* to be appointed by the Secretary of Commerce, after examination to be held under his direction to determine their competency, and to be accredited through the State Department, whose duties shall be to investigate and report upon such conditions in the manufacturing industries and trade of foreign countries as may be of interest to the United States, and for one clerk to each of said commercial attaches to be paid a salary not to exceed $1,500 each; and for necessary traveling expenses, rent, purchase of reports, travel to and from the United States, and all other necessary expenses not included in the foregoing. Such commercial attaches shall serve directly under the Secretary of Commerce and shall report directly to him."

Mr. Julian H. Arnold.

Promoted from the post of American Consul General at Hankow, to the newly created position of Commercial Attache at Peking.

As the appropriation was finally authorized, the Secretary of Commerce was charged with the duty of directing the examination of candidates, and he promptly approved a plan under which, through the cordial co-operation of the Civil Service Commission, those who seemed to possess the required training and the qualifications sought for were invited to present themselves in the various district centers where the Commission maintains examining boards, and undergo a written test, for which a rating of 50% in 100 was fixed.

This written examination involved the preparation of the candidate of several theses on subjects closely related to the work which is expected of the commercial attache when at his post. Methods of developing export trade, the difficulties of this commerce, banking conditions, the political history of foreign countries and similar subjects constituted a test of the range of the candidate's information and his readiness and originality of thought. He was also asked to write 500 words in French, German or Spanish.

Such of those who passed the written examination above the grade of 70%, and whose general record of education and experience seemed to justify further consideration for appointment, were then invited to appear before a committee composed of officers of the Bureau of Foreign and Domestic Commerce, the Civil Service Commission, and the Department of State. Under an oral examination in which the ability of the candidate to speak readily one of the foreign languages required was tested, his personality and other similar qualifications were rated, to form the remaining possible 50% of his marking.

As a result of this method of selection, six commercial attaches have already been appointed. Two consular officers, long in that service, with admirable records in trade promotion work, have been appointed by transfer from the Department of State, and one selection was made by similar transfer in the Department of Commerce.

The primary duty of the Commercial Attache is to learn to know thoroughly the country to which he is accredited. He is to know not only the capital or chief port but the back country and its small cities. He is to meet and learn the views of all classes of men, officials as well as business men, rich as well as poor, educated and the unthinking. Much of the information which he acquires will be merely educational, it will merely form the background for specialized studies. The entire mass of accumulated data will be placed at the disposal of the officers of the Government and of the business men of the country.

To attempt a detailed analysis of the functions of the Commercial Attache at this time would be valueless. In a general way, it is expected that he will act as the personal representative of the Department of Commerce, and hence, of the American business public, in his district. The Commercial Attache is the business diplomat.

He will report on trade and financial conditions generally. He will report on definite and specific opportunities for American manufactured goods. He will answer inquiries from American merchants and manufacturers, and from foreign merchants and manufacturers. He will seek out new markets for American products, and will bring them, through the Department of Commerce, to the attention of the American business public. He will study and recommend methods of increasing the trade relations between the United States and his particular district.

Nine appointments have been made under the new law. London, Paris, Berlin, Petrograd, Rio Janeiro, Buenos Aires, Lima, Santiago de Chile, and Peking have been selected as the most important posts to be covered, and the men assigned for service are fitted by past experience and special qualifications. It is particularly gratifying to see that the Secretary of Commerce has recognized the undoubted ability of Consul-General Julian H. Arnold, of Hankow, by appointing him as Commercial Attache at Peking. Mr. Arnold's reports on the trade conditions of the various ports in the Far East, where he has served as Consul or Consul-General, have been marked by a clear insight into commercial matters. We have followed his career year by year since 1904, when THE FAR EASTERN REVIEW was first published, and have reprinted many of his reports. His work in promoting American trade in China has been admirable and he fully merits the promotion conferred on him. Mr. Arnold entered the Consular service in 1902, as a student interpreter. He speaks Chinese fluently, and has travelled in all parts of China on special commercial studies. He has been stationed at Tamsui, Formosa, Dalny, Foochow, Shanghai, Chefoo and Hankow.

THE STEEL CORPORATION'S USEFULNESS

The prosecution of the United States Steel Corporation by the Federal Government may disclose to the satisfaction of a jury that the spirit of the anti-trust laws have been evaded, but it appears difficult to prove that any other American competitor has been seriously injured. In the summing up of the case against the Corporation by counsel for the Government on October 28th ulto., Judge Dickinson admitted that even if the Steel Corporation had done nothing unlawful after its organization, the Government would still have prayed for its dissolution on the ground that its formation was illegal. This then is the real point at issue, and it is only fair to assume, that such a huge combination of capital, received the highest professional advice in America as to the legality of its formation, and that the Government's attorneys interpret the law differently, and are bent on disintegrating the corporation into a number of competitive units. The records of the case failed to prove that any consumer or competitor had been unfairly dealt with by the Corporation or any its subsidiaries, and it was clearly shown that the Corporation was the one great instrument for the advancement of American export trade in steel products. Mr. Johnson in his defense of the Corporation predicted another war after the present European conflict is over, a war in which Germany will battle for the commerce of the world, and in which war the steel companies in America will be as pygmies if the United States Steel Corporation is disintegrated by the courts.

THE FAR EASTERN REVIEW concurs with Mr. Johnson's view, and can add, that the battle for the commerce of the world is not an event of the future. It is being waged even now. It is not Germany alone that American manufacturers will have to face; there are other commercial antagonists. The fight for supremacy is being waged relentlessly and despite the war, with unabated energy. As long as the battle is waged fairly, and American manufacturers are accorded equitable treatment they can hold their position, but if tactics now being pursued in China to gain the ascendency are followed up, it will not be long ere the door will be closed and a "no trespass" sign nailed up to warn Americans away.

The great commercial struggle for supremacy in the world's markets, has many phases. The butchery in Europe is only one of its high lights, temporarily diverting attention from the main issue. The toll of blood will be paid until one side or the other has enough. The real issue will then be resumed on the commercial battlefield until animosities created by rabid and greedy commercial interests will be revived and death and destruction will again be the temporary arbiter. The commercial campaign waged against Germany by Britain, and against Britain by Germany is typical of the rivalry between two private commercial competitors. When the competition of one formidable antagonist is effectively annihilated the trade rivalry will then be extended to the next powerful competitor. If it can be squashed pacifically, that is, diplomatically, or by waving the big stick, perhaps bloodshed can be averted. So whether the Allies or Germany are victorious in this bloody phase of the great world commercial war, matters little to commercial America, for in either event, America will be the next formidable competitor and must be prepared to meet the onslaught, peaceable at first, but waxing in intensity as her trade expands, until finally the invectives of a rabid press and the pressure of threatened interests brings on another debacle. The first period of the great commercial war of the future to which Mr. Johnson alludes is now being written in human blood and agony on the fields of Europe. It may be many years before the pages of history record the second period of the great struggle, but it is already written that the next object of attack will be America. Forces have been at work for several years to sow the seeds of discord and hate, and the tocsin against America has been sounded.

If Americans hope to hold their place in the sun, the Government would do well to give serious study to the framing of laws which will permit the combination of American manufacturers into powerful Corporations who can hold their own against the commercial strategy of their European opponents. Instead of wasting time in expensive proceedings to emasculate the one great foreign trading organization whose strength is America's greatest asset, it would seem that some laws might be enacted so that the Corporation could continue its foreign business along the lines so successfully pursued to date.

CENTRAL SUGAR FACTORIES IN THE PHILIPPINES.

After many years the Filipinos have awoke to the value of central sugar mills, as the only way to increase the percentage of extraction and secure the maximum profits from the industry. When the idea was first pointed out to them by reputable experts, all manner of objections were raised to the plan, and it was found impossible to secure adhesion to any practicable commercial scheme to permit of outside capitalists erecting centrals in any of the sugar districts. The fundamental requisite for the success of any central milling company, before capitalists will embark in the venture, is a plentiful supply of cane to permit the mill to operate continually, without having to close down every few hours from failure on the part of the farmers to deliver the cane. This can only be secured through a guaranteed contract. It is not alone sufficient that the farmer enters into a contract to deliver so many tons of cane, or the product of so many acres to the mill, but he must give a guarantee or bond for the faithful performance of his side of the contract. Otherwise there is no guarantee that the central sugar mill be a profitable investment, and at any time it might be compelled to close down or at least operate at half time, simply because the cane farmers have not lived up to a contract to furnish their quota of raw material. Unless such a guarantee is forthcoming, no sensible sugar capitalist would invest one cent in the shares of a central factory. The question always arises, where or how is the farmer to produce an adequate guarantee? As a rule the farmer is impecunious or without sufficient capital to faithfully carry out such an agreement. In practice, therefore, the central factory company agrees to lend a sufficient sum to enable him to cultivate and harvest a certain acreage, and as security takes a first mortgage on the lands. This is the only tangible security that can be accepted in such circumstances. The industrial life of the central factory is dependent on the product of a limited acreage, within a reasonable distance from its location. If the farmers agree to furnish a definite tonnage of cane, as a basis for capitalists to erect and operate the central factory, and fail to fulfill their agreement, or plant their lands to other crops, the factory will have to close down, or seek the raw product from distant producers, where the cost of transportation diminishes the customary profits. There are always many petty points of dispute between farmer and factory, and unless some iron bound, unbreakable link binds them, the farmer always has the opportunity of selling his crop elsewhere.

If a proper guaranteed contract can be entered into with the farmers, on a fair basis of payment for the cane, there is ample private capital willing to enter the field. Or if private corporations could control sufficient land to make a large central factory independent of the farmers, capital would be forthcoming.

We note the rather novel and ingenious plan of the Filipino planters to secure the erection and ownership of central factories by using Government credit. As we understand the bill proposed in the Filipino Assembly, a combination of planters in a given district, will guarantee to furnish cane to a central factory on the basis of 50 per cent of the product in sugar. The factory is to be erected by some firm of sugar machinery constructors, who will administer the manufacturing end, until the plant is fully paid for. The mill management will take as its share half the product, and the profits are to be assigned towards payment for the plant. The Government is called on to guarantee the cost of the central factories up to P. 8,000,000. When everything is paid the mill reverts to the combination or corporation of planters.

This is a most ingenious scheme to have the Government guarantee the honesty of the planters, and in effect pay for a central factory to be handed over to the combination as its individual property. If the Government is assured of the profitable nature of the enterprise, why should its guarantee be employed to benefit a private corporation of planters? The farmers secure their legitimate profit from the sale of cane to the mill for fifty per cent of the product; a fair proportion. If they are honest and sincere, and willing to give the necessary bond for the continuous supply of cane, private capital would undertake the erection of the central plant without Government guarantee. As the Filipino planter refuses to abide by conditions accepted as indispensable in all other cane producing countries, and will not sign an acceptable security to abide by his contract to deliver cane to the central factory, he now turns to the Government to assume this responsibility for him, and in addition, asks the Government to hand over the mill to him when it is paid for. Why should the Government guarantee be employed to create a property worth at least $500,000 Gold, which ought to pay for itself in five years, and then hand it over to a combination of planters who have already received their legitimate profits from the sale of the raw product?

If the Government guarantee is extended to cover such a scheme, there is no reason why the Government should not remain in possession of the property, when paid for. The planters have contributed no funds, and are certainly not entitled to special favor from the Government. The precedent that Assemblyman Reyes of the Philippines would create, by the passage of his bill, savors strongly of "graft"

Or it may be taken as the Filipino solution of the guarantee problem for the erection of a central factory. They refuse to entertain any proposition for the faithful performance of their contract, but say in effect, we will not consent to any scheme which embraces our lands as a guarantee for the erection of a central, so the only way is for us to own the central. Bribe us to be honest. Make us a present of the central factory after it is paid for, then we will have some real incentive to live up to our obligation to furnish it with the cane our contract calls for. The Government will guarantee to outside capital that which we individually refuse to give; we will receive our legitimate profit from the sale of the cane to the mill, and then when it is paid for, the benevolent Government will hand over the property to us. It's a brilliant scheme—for the planters, and their legislative partners.

G. B. R.

ENGINEERING IN CHINA

EXTRACTS FROM THE ADDRESS OF MR. A. C. CLEAR, PRESIDENT OF THE ENGINEERING SOCIETY OF CHINA

The inaugural address of President A. C. Clear in taking the chair for his second term as head of the Engineering Society of China was marked by a deep and sympathetic insight into the development problems of China as a whole, and of Shanghai as its great commercial port of entry. Mr. Clear very briefly and ably summarized the engineering progress of the year, and the needs of Shanghai as a growing metropolis, and, in conclusion dwelt on a theme worthy of the deepest consideration on the part of Chinese officials and capitalists interested in engineering development. In the closing words of his address, Mr. Clear suggested a line of thought which if followed up, might prove of inestimable value to the country. Mr. Clear said:—

"I would remind you that we, Engineers, are the men upon whom the brunt of the actual work of development will fall, and when in the numerous proposals that spring up mushroom-like over the length and breadth of this great country, we see any real sign or hope of progress it is our duty not to submit these to that easiest of all, destructive criticism, but accept the harder task of selecting those proposals which are substantial and good, using all the influence we can command to construct from these something that will be of general benefit not only to this country but to the whole world.

"The world is now so closely bound with ties of easy inter-communication that the development of one country is bound to react on others. One of China's needs is to have an independent body of expert opinion to which important technical matters could be referred. Why should we not eventually supply this? In our International character lies the strength of any opinions advanced by us. Our steadily increasing membership of responsible engineers is a convincing proof of the value of the work being done and of the status of this society, whose animating principles are those of the great engineering institutions throughout the world, viz., the general advancement of the science and practice of engineering in all its branches."

If such an idea could be carried into practical effect, without fear of international jealousies or private commercial considerations cropping up from time to time, many problems now confronting China might be amicably adjusted with due regard to the interests of all countries. If a committee of this Society composed of broad minded engineers of various nationalities, could be selected to pass opinions on some of the knotty points continually arising, a better feeling might be engendered. We have in mind the propaganda of a very important association whose declared aim is to displace American and German technical and engineering advisers to the Chinese Government by those who will work for the attainment of the chief object of the Association. An analysis of its official literature indicates that the desired object is to have British engineering standards and specifications adopted officially by the Chinese Government. In other words Americans and Germans are to be ousted in favor of those who will advance the special objects of one national association. The propaganda has the stamp of official approval. The code of ethics governing the work of engineering societies the world over call for honorable and disinterested technical advice from any of the members employed in a consulting capacity. If the Chinese Government employs only engineering advisers who owe their position to the influence of one association, it goes without saying that the aspirant to the post will not receive its support unless he is in thorough accord and sympathy with the aims of the association, and pledges himself to further its propaganda.

In such matters the Engineering Society of China could materially advance the cause of China, and uphold the ethics of the profession by giving disinterested advice not only to the Chinese, but to those national associations at home who overlook the finer points of professional ethics. We have not the space to devote to a thorough exposition of this subject at this time, but hope to be able to present it in full at an early date.

Mr. Clear's able resume of China's engineering projects, unfortunately did not cover all the important works originated during the year, but was confined largely to those having a special bearing on the development of Shanghai. A high tribute was paid by him to the American engineers who conducted the recent survey of the Hwai River district for the American Red Cross Society. In this respect, Mr. Clear's remarks stand out in sharp contrast to the petty querulous criticisms and ill advised aspersions on American Engineers so prevalent in other quarters.

The opportunity afforded the Standard Oil company in the North China Oil Fields and the new mining regulations were cited as evidences that China is favoring the development of her resources.

Turning to railways, which loom largely in the development of the country, Mr. Clear said that at no period in Chinese history had so many agreements for their construction been completed as during the last twelve months.

The first in order of signature of Agreement was the Pukow-Sinyangchow Railway. This, together with the Shanghai-Nanking, the Shanghai-Hangchow-Ningpo and Canton-Hankow Railways was included under a Concession obtained by the British and Chinese Corporation in 1898, when a preliminary Agreement was entered into, upon the understanding that the final terms should await those of the Shanghai-Nanking Railway, and be drawn up similarly.

It was not until July, 1903, that the Shanghai-Nanking Railway Agreement was signed. It was then decided to construct the Tientsin-Pukow Railway before concluding arrangements for this cross country line, and not until 1912 were negotiations resumed. The agreement was signed on November 14, 1913.

"The survey is now clearly complete and construction work had actually commenced when war for the fourth time in this railway's history has put a temporary stop to further construction work. The line starts from Wu-I on the Tientsin-Pukow and connects up with Sinyangchow on the Peking-Hankow Railway, a distance of approximately 260 miles. The country traversed is a rich agricultural district with practically no other means of communication or of transport than that supplied by carts. China carts on Chinese road are, under the best of circumstances, a slow and unsatisfactory means of transport for goods, and for passengers, possibly painful might be added. In addition to a heavy grain traffic there are considerable coal deposits existing in the near neighbourhood of the line which may be developed to the benefit of the railway both from its own fuel supply and as an item of freight. There is every possibility that this railway will affect the future of Shanghai as it opens up a large tract of practically untouched country, and given better means of communication across the Yangtze at Nanking than at present exists for the handling of goods traffic in bulk, a great deal should find its way into our local markets."

The Nanking-Nanchang-Hunan Railway would connect with the Shanghai-Nanking Railway at Nanking and extend through Nanchang joining the great Canton-Hankow trunk line either through Pingsiang at Chuchow or possibly direct with Changsha. The line would traverse Anhui and Kiangsi, provinces rich in agricultural produce and in minerals, particularly in coal. The agreement for this Railway was signed on March 31 of this year and the preliminary survey work had recently been started. The length of the main line is approximately 650 miles.

One small railway which amongst its mightier brethren might easily pass without notice but would be of considerable local importance was the junction line at present being surveyed between the Shanghai-Nanking and Hangchow-Ningpo Railways.

This small junction would overcome some of the disadvantages under which the Shanghai-Hangchow-Ningpo Railway was at present labouring, more particularly with regard to the terminal station at Shanghai. The present difficulties attending the transport of goods by this route afforded a good illustration of similar difficulties to be overcome in the transport of goods from the interior to the coast.

"From the Yangtze through the Poyang Lake and a magnificent series of waterways runs one of the great trade routes. Waterborne traffic on this route is interrupted at Yushan by a range of hills marking the border line of Kiangsi and Chekiang provinces. These hills necessitate a laborious carry over of some 30 miles to Changshan where boats are again requisitioned to convey the produce another stage upon its journey down the Tsingtong River to Hangchow. There the trade route diverges to Soochow, Wusieh, Shanghai and other towns. The great sea wall which runs unbrokenly from below Hangchow to the sea, whilst forming a barrier to hold the salt water of the Tsingtong river in check, obtrudes another obstacle to the transport of waterborne cargo proceeding inland. Goods are, therefore, once more discharged, and prior to the building of a railway, were loaded again into boats which literally fought their way through the narrow waterways of the city to the more open waters of the Grand Canal. This passage through the city was still further complicated by boats laden with produce from the towns previously mentioned, coming in the opposite direction. Knowing the "each man for himself" tactics of the Chinese boatman and the persistent power of his boathook, the wonder is, not that this short journey through the city of seven miles took one month for its accomplishment, but, that it was ever accomplished.

"To obviate this delay a Railway was constructed from Zahkow on the Tsingtong River to Konsenchiao on the Grand Canal to serve as a carry over between the two waterways and is now very fully occupied in the transport of native goods

"The railway known as the Shanghai-Hangchow-Ningpo Railway was connected to this short carry over piece of line, but owing, as previously stated, to the unfortunate position of the Shanghai terminus station, a very small proportion of the goods traffic is rail-borne to Shanghai. The junction line now being built will tend to remedy this objection by bringing the goods into closer touch with the markets of Shanghai."

A short line similar to that from Zahkow to Konsenchaio was also projected on the borders of Chêkiang from Yushan to Changshan. The boats would be better off eventually than they had ever been by acting as feeders to the railways and instead of doing a few long laborious trips each year, often under heart-breaking conditions, with interminable delays, many short trips could be made that would pay much better. Such combination of waterways and railways would result in ideal transport facilities."

Mr. Clear unfortunately omitted any reference to the important British railway contract for the Shasi-Singifu line, which will constitute the Western link in a great all British trunk line, from the sea at Shanghai to the provinces of Kweichow and Yunnan. Connecting at Changsha with the Nanking-Nanchang-Hunan line, the Shasi-Singifu Railway will serve as a very valuable feeder to the former and exert a great influence on the future of Shanghai.

WILLIAM WOODVILLE ROCKHILL.

While on his way to report to President Yuan the results of a confidential mission confided to him in April last, death overtook Mr. W. W. Rockhill at Honolulu. His loss will be keenly felt by China whose cause found in him a true and sympathetic friend and advocate. Americans will have special reason to regret the loss of his influence in Far Eastern Affairs, especially as concerns China, in which country he has always manifested a keen interest, and whose welfare and happiness was very close to his heart. At the time of his death he was personal Adviser to President Yuan, who learned to esteem and admire his work and character during the many years the two officials were thrown into intimate diplomatic association.

It was chiefly through his efforts that the United States Government released the huge portion of the Boxer Indemnity legally due to her, whereby the Chinese Government was able to establish the Tsinghua College which is now yearly sending so many Chinese students to be educated in America. The good influence that these students are wielding and will continue to wield in the shaping of the country's future, is immense, and for this and other reasons, Mr. Rockhill will be gratefully remembered by the thinking men of China.

The late Mr. William Woodville Rockhill was born in Philadelphia in 1854. He graduated from the Military School of St. Cyr, France, and served three years as lieutenant in the French Army in Algeria. He was appointed Second Secretary of the American Legation in Peking on April 9, 1884; Secretary July 1, 1885; Chargé d'Affaires *ad interim* at Seoul from December 11, 1886, to April 3, 1887; left Peking on leave April 2, 1888: resigned in the United States July 5, 1888, to take effect on expiration of leave; two scientific missions to China and Tibet under the auspices of the Smithsonian Institution, 1888-92; appointed Chief Clerk, Department of State, April 14, 1893; Third Assistant Secretary of State, April 14, 1894; delegate to the International Congress of Geography, London, 1895; Assistant Secretary of State, Feb. 1896; resigned May 10, 1897; appointed Envoy Extraordinary and Minister Plenipotentiary and Consul-General to Greece, Roumania and Servia, July 8, 1897; Envoy Extraordinary and Minister Plenipotentiary to Greece, Roumania and Servia, May 25, 1898; resigned May 19, 1899, on appointment as Director of the International Bureau of the American Republics; granted leave of absence July 20, 1900, to proceed to China as Special Commissioner of the United States; appointed Plenipotentiary on the part of the United States for the settlement of the Boxer troubles Feb. 24, 1901; signed the final protocol Sept. 7, 1901; resumed duties of Director of the International Bureau of the American Republics, October 24, 1901; resigned March 7, 1905; appointed Envoy Extraordinary and Minister Plenipotentiary to China March 8, 1905; designated Ambassador Extraordinary to represent the United States at the funeral ceremonies of His Majesty the Emperor of China, April 24, 1909; appointed Ambassador Extraordinary and Plenipotentiary to Russia, May 17, 1909; Ambassador Extraordinary and Plenipotentiary to Turkey, April 24, 1911; successor appointed September 4, 1913.

In April of this year he was appointed Adviser to President Yuan Shih-kai, and departed shortly afterwards on a special mission abroad.

Mr. Rockhills's Last Speech

Just before his departure on his last journey Mr. Rockhill made a splendid address before the members of the Asiatic Institute, at a dinner in his honor held at the Century Club in New York on November 12th. This notable speech, his last public utterance, is of supreme interest to all Americans, and others concerned in the maintenance of the Open Door, and the peace of the Far East. It demonstrates that although the Administration now directing the affairs of America, has sidetracked American interests in the Far East, there are those who are keeping a watchful eye on the rapid succession of events which are slowly but nevertheless surely and effectively undermining her position and nullifying the spirit of the Open Door. The day must come when secret diplomacy will be compelled to face exposure and judgment before the bar of American public opinion, and when the natural and rational deductions are made from a presentation of actual facts, there will have to be a readjustment of conditions. Therefore Mr. Rockhill's last speech possesses an added interest at this time, and is reproduced in full.

"Gentlemen: I deem it a great honor and an exceptional piece of good fortune that you have been so kind as to invite me to meet the members of the Asiatic Institute this evening and that you should permit me to address you on a topic in which you and I are keenly interested; that of the relations of China and the United States.

Among the objects of the organization of the Asiatic Institute was the "establishment of the study of Chinese progress and reforms, and the contribution by the co-ordination of American activities to the resolution of questions arising in Eastern Asia from the contact of different civilizations."

During the last six months I have had the honor of submitting to the Institute in three reports the general results of a journey which I undertook during last winter and spring through the Chinese Empire, a journey which led me to Urga, the capital of autonomous Outer Mongolia, to Harbin, the center of Russian influence in Manchuria, to Mukden, the headquarters of Japanese activities in the southern part of the same region, and thence, by various slow stages, to Canton in the south.

In these reports I endeavored to give an impartial view of present conditions, both political and economic, to indicate the difficulties the government has had to meet and must meet in the future in its efforts to establish order and successfully adapt to the peculiar wants of the nation the methods of modern administration and material development. I referred to the present condition of the people, and noted, with apprehension for the future of representative government, the absence of public sentiment, and I called attention to the universal hope for the establishment of a strong centralized government and the creation of an efficient and honest administration.

The conclusions I then reached were that, under the guidance of President Yuan Shih-k'ai, a strong centralized government was being established and that he was endeavoring with his well known vigor and determination to create a good administration. Since then nothing has occurred to shake my belief in his determination to bring about this wonderful change.

Mistakes will be made, experiments will fail, criticism, not only of the men but of the methods they employ, will be frequent and violent in China and out of China, but with it all the modernization of Chinese life, social, political, and economic, will go on, and will, it is believed, ultimately create a stronger, richer, and let us hope, freer and happier country than in the past.

In the meanwhile I agree with President Eliot in thinking that "the Western world ought to stand by China with patience, forbearance, and hope, while she struggles with her tremendous social, industrial, and political problems."

PROGRESS OF AMERICAN INFLUENCE.

Let us turn now to the interest of the United States in the progress and reforms of China. Though the opening of our relations with China in the latter part of the eighteenth century was solely for purposes of trade, in the first half of the last century our missionaries began their establishment in the country and rapidly acquired the well merited friendship and confidence of the people by the excellence of the education they were able to give the children. Thus it was that the United States began the modern educational movement in China.

In the Sixties, Chinese who had received their early education in missionary schools began coming to the United States to complete it here. In 1871 the Viceroy of Chihli, Li Hung-chang, sent a Chinese Educational Mission to the United States with thirty very promising lads to be educated in this country. This proof of the trust placed in the United States by China was welcomed by us at the time, and both the government and the people of this country accepted it with gratitude, moved by humanitarian, idealistic, or more practical reasons, but all seeing in it a way to extend our culture and our influence in China, an opinion which years have confirmed, as our educational interests among the Chinese have grown.

And so we went on for years, dividing the attention we bestowed on China between trade, proselyting, and education, trusting for the maintenance and extension of our interests in the country to the most favored nation clause of treaties, and to the advantages we could now and then derive indirectly by the forceful means then frequently had recourse to in China by other nations, the so-called "Gunboat Policy," and to the purity of our intentions.

ERA OF ENCROACHMENT.

With the war between China and Japan which broke out in 1894 a new era opened, that of rapid encroachment on China by its powerful neighbors. For political as well as commercial reasons they sought to partition the Empire among them by the creation of spheres of influence, the securing of strategic bases, the building and operating of lines of railway, and the acquisition of vast and ill-defined concessions over the whole face of the land. It became apparent to the United States that if it did not take measures to check the movement its trade would be wiped out, its religious and educational interests restricted, and its influence and prestige with the Chinese reduced to naught.

In 1899 the administration at Washington put into practical shape the suggestions then being made by various British writers and statesmen in favor of securing to the commerce and navigation of all nations in China equality of treatment within the so-called "spheres of influence," in other words, the maintenance of what is called the "Open Door" policy.

You recall the result of the negotiations entered into in 1899 between our government and the various Treaty Powers directly interested in the question. They all accepted the proposals made by the United States, some in a whole-souled way, others with reluctance, others, again, with mental, or even verbal reservations, but, notwithstanding this, the Open Door policy became an acknowledged part of the general policy of the Treaty Powers in China with the United States as its guardian. This was the first, and it has turned out to be the only, successful attempt which has so far been made to initiate a general understanding, a common action of all the Great Powers having interests in the Far East, affording a means of settlement of pending questions, while recognizing all legitimate interests, and rights.

U. S. STRONG FOR OPEN DOOR

The value of the Open Door policy was not solely in the protection it afforded trade and navigation, it had an important political side; it was a powerful weapon for protecting China's integrity, for preserving her independence. This side is shown by our action during and after the Boxer troubles in 1900. In the words of Mr. Hay, our then Secretary of State, "The policy of the United States is to seek a solution which may bring about permanent safety and peace to China, preserve Chinese territorial and administrative entity, protect all rights guaranteed to friendly Powers by treaty and international law, and safeguard for the world the principle of equal and impartial trade with all parts of the Chinese Empire."

Admiral Mahan has clearly stated the same conception of its scope when he said that "the Open Door, to be beneficially effective, demands evident security of maintenance, freedom from disturbance, under the balance of forces applicable in the Pacific in general, and in the Western Pacific in particular."

In the face of considerable difficulty and of not a few attempts on the part of sundry Powers to evade the faithful performance of the promises they had given us, we struggled manfully for five years for the maintenance of the Open Door in every corner of the Chinese Empire, even though in so doing we may have temporarily strained the good relations we always wish to maintain with the whole world.

During the Russian supremacy in Manchuria our trade in that region reached the high tide of its development, but so popular had become among our people the Policy of the Open Door that it was held with the Monroe Doctrine as a declaration of national policy, and so they gave sympathy and even financial support to the Japanese when, in 1904, they went to war with Russia after the latter's refusal to agree to their demands, the first of which was "mutual engagement to respect the independence and territorial integrity of the Chinese and Korean Empires, and to maintain the principle of equal opportunity for the commerce and industry of all nations in those countries."

JAPAN'S PLEDGES OF GOOD FAITH

In 1905, before the Russo-Japanese war was over, Japan renewed her treaty of alliance with Great Britain, one of its objects being "The preservation of the common interests of all Powers in China by insuring the independence and integrity of the Chinese Empire and the principle of equal opportunities for the commerce and industry of all nations in China."

Not content with these pledges of its good faith in regard to the policy of the Open Door in China, Japan, in 1907, pledged herself again to it in an agreement with France, and yet again in 1908 to the United States. In this case it was furthermore agreed that for the defense of the Open Door Japan would, after agreement on the measure, join with the United States whenever occasion might arise in supporting "by all pacific means at their disposal the independence and integrity of China and the principle of equal opportunity for the commerce and industry of all nations in the Empire."

Japan had taken the place of the United States as guardian of the Open Door in China, and become its chief exponent.

There is absolutely no doubt that in southern Manchuria British and American trade have been steadily declining since that part of China passed under Japanese control, nor is there any doubt that it has been in a great part driven out by Japanese competition supported by preferential customs and railway rates, shipping bounties, and successful resistance by its traders in Manchuria to paying China's internal taxes. Twelve years ago the American piece goods trade held the market of Manchuria; to-day, out of a total trade in cotton piece goods alone of about twenty-four millions, our share is less than three millions, all lost to Japanese manufacturers. The greater interests of Great Britain and France in other parts of the world caused these countries to sacrifice their trade interests in China, to give a free hand to Japan in economic matters.

As to America, the protagonist of the Open Door Policy, it let pass out of its hands the duty and responsibility of maintaining it, and the honor of retaining the commanding role in the affairs of the Far East which would have been ours. Before, however, retiring from the scene of activity in China our government, in 1909, made one more attempt to maintain the policy of the Open Door and justify the expectations of the discoverers of the panacea called "Dollar Diplomacy," by securing American financial participation in several important loans which the Government of China was seeking to negotiate with various foreign banks.

PERMANENT MORAL BENEFIT

I will not dwell on the stirring incidents which marked the fleeting appearance of America in the field of finance and politics in China, but I cannot pass it by without mention of the permanent moral benefit it brought us, the practical assistance it rendered China, while it lasted, in defending her rights and interests, and the profound regret of China and her friends, when, moved by idealist views and imperfect information, the present administration at Washington saw fit, in the spring of last year, to withdraw its support from the American banks.

While declaring that "our interests are those of the Open Door, a door of friendship and mutual advantage. This is the only door we care to enter," it declined to take a step to show the one or to secure the other. I only know of one blow equally heavy which has been dealt our interests, our prestige, and our influence in China; it was the cancellation, in 1905, of the concession of the American-China Development Company.

Let us look now at our present relations with China, those arising out of the political situation created by the extension of the operations of the European war to Chinese territory.

When war broke out in Europe the Government of China was among the first to declare its neutrality and to issue a proclamation in accord with Western precedents for the enforcement of the strictest neutrality, and this was at once put into effect.

Recalling furthermore the action of the American Government when war broke out in 1904 between Russia and Japan and when it had got the neutral Powers to join with us in asking the belligerents to limit the area of war operations in China to Manchuria, and had thus been the direct means of sparing China much loss and great expense, the Government of Peking took the additional step of asking the Governments at Washington and Tokio to use their good offices in preventing hostilities being carried out in the Far East. Tokio replied that the time had not yet come for such action, and Washington, while agreeing to the general desirability of such limitation, did nothing.

Then came the entry of Japan into the war for the purpose of capturing and eventually returning to China the powerful fortified naval base built by Germany on territory which China had leased it in 1898 "to strengthen the bonds of friendship which unite the two countries, and to develop the economic and commercial relations between the subjects of the two States," and which Japan and the Powers of the Triple Entente, and possibly not a few other Treaty Powers, had come to consider in German hands a standing menace to the peace of the Far East.

CONFLICT EXTENDED TO CHINA

The action of Japan was taken after consultation with Great Britain, and, inferentially, with the approval of France and Russia, and Great Britain sent a small force of troops and some ships to participate in the Japanese attack, thus binding itself equally with Japan to the faithful performance of its pledges.

Hostilities between Powers with which China entertained the closest and friendliest relations on territory over which by the terms of China's agreement with Germany she still had "all rights of sovereignty" and on which fortifications had only been allowed to be erected by Germany for the purpose of "increasing the military readiness of the Chinese Empire," was on their part a most flagrant breach of neutrality, but China could not prevent it, she had, perforce, as humiliating as the admission must be, to accept the inevitable.

A proclamation limiting the area of military operations to a certain zone was issued, and steps taken to enforce it, but violation after violation of her neutrality by all the belligerents have followed, and each has protested to China for her remissness, and China in turn has protested at each offense of the combatants. Kiaochau has now fallen, and we may, I think, rest assured that the pledges of Japan and Great Britain will be kept and that the integrity of China will not suffer. The best interests of China have been served by the military operations in Shantung having been vigorously conducted on both sides and promptly brought to an end.

The question of Chinese neutrality, or rather China's power effectively to enforce it, is one which deserves sympathetic attention and friendly assistance in settling, for under the régime of extraterritoriality, of international settlements, concessions, leased territories, railway zones, etc., etc., in none of which is China able to fully enforce its laws and orders, it is impossible that the Government can discharge its duties of neutrality, and inconceivable that it should be held strictly responsible for their performance.

DISREGARD CHINESE SOVEREIGNTY

The disregard of Chinese sovereignty and neutral rights by Treaty Powers in China within the settlements, concessions, and in other places in which they have acquired, or claim, certain privileges, are innumerable in the past, and the present war is but adding largely to the already formidable list. It is sincerely to be hoped that on the termination of the present war the Treaty Powers in conjunction with the Chinese Government may devise adequate means to improve China's situation in this respect; for the time being there seems nothing more to be said or done.

The withdrawal of the naval and military forces of the belligerents from China happens at a period when the internal condition of the country is still unsettled; when notwithstanding the energetic measures the Government is taking, not only to keep its neutrality but to preserve the internal peace of the country and to protect foreigners and their interests, there is constant apprehension, if not actual danger, of internal troubles and disturbances. These conditions may create, probably have already created, a sense of insecurity throughout not only the foreign communities in China but among the Chinese themselves, which it is easy to understand, and which imposes, it seems to me, on those Treaty Powers which have fortunately been able to remain neutral, and which usually maintain naval and military forces in the Far East, the clear duty of supplying this deficiency, and thus assuring a fair degree of protection to foreigners and, at the same time, assisting very materially the Chinese Government in effectually carrying out its present very onerous and difficult duties. Among the neutral Powers which could and should take over the discharge of this duty the United States stands first.

I have not heard that our naval forces on the China Station have been increased or that we have taken any steps to fulfil this duty. I can but trust that the necessity of the case has been appreciated and adequate measures adopted to discharge our obligation.

In conclusion, it seems clear to me that so long as we shut our eyes to the undoubted fact that, in the East at least, from Stamboul to Tokio, politics, finance, and trade go hand in hand,

and that neither the profits of trade can be fully reaped nor our influence and prestige be adequately upheld without incurring the responsibilities incident to political and financial activity, we must be content to play a modest, effaced role in the Far East, unworthy, in my opinion, of our great country and its vast interests in the Pacific.

PHILOSOPHER AND FRIEND

The role of philosopher and friend of the Chinese is left us. China still looks to us as able to give her youth the education best suited to prove of benefit to them and their country. It must be a source of genuine satisfaction to us to know that a large majority of the Chinese reared in our missionary educational establishments and in this country have shown themselves in after life well-balanced, useful men. Not a few of them have risen to the highest offices of the State, or become eminent in the professions which they have chosen.

Some, it is true, of less poise and of more emotional temperaments, carried away by the enthusiasm of youth and the novelty of the flights and fancies of the teaching in our most advanced schools of political thought, failing utterly to recognize tremendous difficulties and the length of time which the the change of China from the oldest hereditary autocracy to a constitutional, representative democracy must require, have foolishly tried to force the pace of reform and change in China.

They have failed, as was to be expected, but the responsibility for their rash and foolish actions must partly rest on us, who have not always recognized the full extent of our self-assured duty in educating Chinese who were all to become important factors in the upbuilding of their country, and who have often, both in our public press and elsewhere, given encouragement to the mad schemes and impossible theories of these misguided and trusting enthusiasts.

INTEREST CANNOT CEASE.

A serious responsibility also rests on us as regards those who, trained under our guidance, have attained eminence in public or business life; our interest in them cannot cease when they leave our colleges. If we would discharge faithfully our trust we must follow them in after life so that they may always feel that friendly assistance and honest, impartial advice or criticism is sure to be found and given whenever they require it or whenever we think they should have it.

China, in confiding to us the education of an ever increasing number of her youth, has believed in the genuineness of our promise, in our willingness to discharge our trust to the full. She looks to us to teach her youth to be sane, useful men and to steer them clear of the pitfalls of democracy, the vaporings of doctrinaires, and not to withdraw our interest from them in after life, but to encourage and give our constant moral support to them and their country in its efforts to follow the paths we have shown them.

I have endeavored to touch on some of the most salient features of our relations with China; there is nothing to be particularly ashamed of in them, though we have not always been fair in our dealings with her. Our trade has greatly increased as years have rolled by, though this increase has not been maintained as it might have been if we had continuity in our foreign policy and realized to the full our great opportunities, with, of course, accompanying responsibilities, which we have in the Pacific in drawing closer and closer our relations with both China and Japan. It is to assist in the attainment of this end that the Asiatic Institute was founded; may it accomplish to the full its great and patriotic object.

THE SPLENDID SPIRIT OF THE SAMURAI

Last month several aspects of the situation created by the surrender of Kiaochou to the Japanese were considered, but the recent important announcement by Baron Kato, the Japanese Minister for Foreign Affairs, has created an entirely new situation and consequently it seems desirable to devote a little more attention to the subject. Baron Kato in this speeh, in reply to an inquiry by Mr. Ogawa in the Imperial Japanese Diet said, *inter alia.*—

> "I understand that what Mr. Ogawa means in his permanent solution of the Chinese question *is to secure the maintenance of China's territorial integrity.* This policy has been followed by the Japanese government since many years ago and the present ministry does not intend to diverge from this fundamental line of policy. Though Mr. Ogawa asked whether the government is going to restore Tsingtau to China or not yet the question is to be settled in the future and I am not in a position to give any definite reply to this question.
>
> "Mr. Ogawa then inquires if the government has entered into any contracts with a foreign country, which contract might compel Japan to restore Tsingtau to China in any way. But I assure you that the government has never entered into such a contract with any foreign countries about the question of Tsingtau. The reason for which the government in its ultimatum requested Germany to restore the leased territory to China is just similar to that for which years ago the three powers jointly requested Japan to restore to China the Liaotung Peninsula which Japan had occupied during the China-Japanese war. Mr. Ogawa said that if Germany accepted the Japanese ultimatum, the result would have been rather difficult for Japan, because there is a special contract between Germany and China as to the restoration of Tsingtau to China. But as you may know from the terms of the government's ultimatum to Germany our intention was to cause Germany to restore Tsingtau to China without any conditions or compensations whatever."

Naturally enough the somewhat ambiguous wording of this utterance excited considerable discussion. Those who regard Japan's actions with fixed suspicion seized upon this enunciation of policy as a proof positive that she had harboured designs inimical to China's interests from the outset. It is well to consider what ground they may have for this belief and in order to understand thoroughly the position it is desirable to revert to the circumstances as they existed prior to the war and the subsequent developments up to the time of Baron Kato's last pronouncement which was made on December 9.

By the terms of the Anglo-Japanese Alliance the countries bound themselves to assist each other in maintaining the peace of the Far East. As Germany possessed in Kiaochou a naval and military base considerable curiosity was manifested as to whether she would elect to make some arrangement with China, send her ships out to fare as best they might, and convert her military forces into civilians for the period of the war, requesting China to undertake the protection of the leased territory. Action such as this, if taken while there was still time, would undoubtedly have saved much loss of life and obviated the present difficult problem. It is said that pourparlers with a view to some arrangement such as that outlined above were actually in progress when Japan presented her ultimatum on August 15. This momentous instrument read as follows:—

> "We consider it highly important and necessary in the present situation to take measures to remove the causes of all disturbances of peace in the Far East and to safeguard the general interest *contemplated by the agreement of Alliance between Japan and Great Britain in order to secure a firm and enduring peace in Eastern Asia,* the establishment of which is the aim of the said agreement. The Imperial Japanese Government sincerely believe it their duty to give advice to the Imperial German Government to carry out the following two propositions: Firstly, to withdraw immediately from Japanese and Chinese waters German men-of-war and armed vessels of all kinds and to disarm at once those which cannot be so withdrawn, and secondly, to deliver on a date not later than September 15 to the Imperial Japanese authorities, without condition or compensation, the entire leased territory of Kiaochou with a view to the eventual restoration of the same to China. The Imperial Japanese Government announce at the same time that in the event of their not receiving by noon, August 23, 1914 the answer of the Imperial German Government signifying unconditional acceptance of the above advice offered by the Imperial Japanese Government, they will be compelled to take such action as they may deem necessary to meet the situation."

Considerable speculation was caused by the use of the word "eventual" in the reference to the return of the leased territory to China. Those who distrusted Japan pointed out that the expression was so indefinite as to render the pledge or undertaking almost valueless. However, the majority thought that in all fairness Japan should be given a fair opportunity to show that she intended to act in perfect good faith and not to seek to evade her self-imposed obligations by verbal straw spliting. More especially did this opinion prevail in America in consequence of the publication in the "New York Independent" of the following message from Count Okuma, the venerable Prime Minister of Japan:—

> "I gladly seize the opportunity to send, through the medium of the "Independent," a message to the people of the United States, who have always been helpful and loyal friends to Japan. It is my desire to convince your people of the sincerity of my Government and of my people in all their utterances and assurances connected with the present regrettable

situation in Europe and the Far East. Every sense of loyalty and honour oblige Japan to co-operate with Great Britain to clear from these waters the enemies who in the past, the present and the future menace her interests, her trade, her shipping, and her people's lives. This Far Eastern situation is not of our seeking. It was ever my desire to maintain peace, as will be amply proved; as President of the Peace Society of Japan I have consistently so endeavoured. As Premier of Japan, I have stated and *I now again state to the people of America and of the world that Japan has no ulterior motive, no desire to secure more territory, no thought of depriving China or other peoples of anything which they now possess.*—OKUMA."

We find, then, that the reason assigned for Japan's participation in the military operations in the Far East was her obligation to Great Britain under the terms of the Alliance. But the Alliance also pledges the signatory powers to *the preservation of the territorial integrity of China*, and consequently we naturally find Japan in her ultimatum voluntarily pledging herself to return Kiaochou to China in the event of Germany surrendering the protectorate without fighting. It is perhaps worth while noticing in passing that some of the baser Japanese newspapers have taken the fine point that Japan's undertaking to return the territory was dependent upon its peaceful surrender by Germany. Papers such as the "Japan Times" and the "China Weekly Advertiser," both of which enjoy a semi-official status, have very correctly pointed out that it would be a disgrace to Japan to attempt to evade her obligations on a point that might appeal to a fourth rate police court solicitor, but to no one else. To continue. Not content with letting the ultimatum itself proclaim the correctness of Japan's motives, the Prime Minister, Count Okuma, telegraphed a message to the American people reaffirming that Japan had no ulterior motive, no desire of securing more territory and no thought of depriving China or other peoples of anything which they now possess. Up to this stage it must be admitted that no possible fault could be found with Japan's attitude. She voluntarily gave assurances to the world that she would not take advantage of the situation created by the war to occupy permanently any portion of Chinese territory, though the terms of her alliance with Great Britain rendered any such pledge supererogatory.

Germany, as was generally anticipated, decided not to surrender Kiaochou without a struggle. With the purely military operations we have no concern, but as political questions became involved they have to be noticed as they have a direct bearing on the main problem. One arose immediately Japan made preparations to land troops at Lungkow. China, while protesting against any infringement of her neutrality, recognized the logic of the situation by offering to declare a war zone, as was done in regard to the Russo-Japanese War. These limitations did not suit Japan, who let it be understood that she would take what action she deemed to be necessary to ensure the success of the military operations. China, with admirable restraint, contented herself by formally protesting when the Japanese military authorities laid a line of light railway for the transportation of stores and munitions to the front and committed other acts which it was considered were justified by military necessity. While the Chinese Government placed its formal protests on record it very wisely went no further and allowed Japan to develop her plans unmolested as far as China was concerned. The British troops who took part in the investment of Kiaochou landed within the leased territory, but it is only fair to Japan to remember that their debarkation was only rendered possible by the preliminary occupation of the locality by the Japanese forces which had crossed from Lungkow. The occupation of the Shantung Railway as far West as Weihsien elicited another protest from China, but Japan again claimed that her action was dictated by military necessity and eventually occupied the whole length of the line to Tsinanfu. It is not our object to discuss whether Japan was right in her contention that her admitted violation of China's sovereign rights were rendered necessary by the military problem with which she was faced. But it must again be emphasised that China deserves well of the world for the calmness she showed under conditions which were sufficiently irritating and which induced in quarters in which China's military weakness is not apprehended a demand for vigorous action. The Chinese Government was faced with the position that to take action would be fatal while to take no action might cause serious discontent among the people of Shantung in particular and afford an opportunity for revolt to those elements of the Chinese body politic which are always on the lookout for an opportunity to fish in troubled waters. By dignified protests which never went to extremes China justified herself in the eyes of the world and reassured the better elements among her own people.

It was not until after the unconditional surrender of Kiaochou that the question of the future disposition, or to be strictly accurate the immediate disposition, of the leased territory became a subject of active discussion. It speedily became apparent that although Great Britain had taken part in the military reduction of the fortress, her arrangement with her ally did not demand a share in the civil administration after its inevitable fall. Consequently the question is one between China and Japan. The surrender of the fortress took place on November 1, and it is noteworthy that the expressions of opinion by the two semi-official Japanese newspapers referred to earlier in this article were made AFTER and not before this event, thus showing that actual possession had not modified the previously expressed intentions of the Government. But then came Baron Kato's statement in the Imperial Diet on December 9 which has caused much apprehension in various quarters and which must be admitted by those most friendly to Japan to be at least ambiguous.

The explanation we believe to be simple. Those who know anything about Japan's domestic politics know that the Cabinet is unfortunate enough not to be able to rely upon a majority in the Diet. Japan, though owing to the prescience of the late Prince Ito she has made political haste slowly, has within the last year or two developed the party system on the lines that obtain in other countries with representative institutions. In former days it was a matter of no consequence whether the Cabinet had a majority in Parliament or not as it was solely responsible to the Emperor. An adverse vote was purely of academic interest and no Prime Minister felt it incumbent upon him to resign simply because the Parliament did not endorse his policy. All that is changed, and now no Cabinet would dare to attempt to carry on unless it had the support of the people's representatives. Here then we believe is to be found the explanation of Baron Kato's speech. Although Japan has made considerable progress during the past century the bulk of her population are not yet qualified to grasp and apprehend the obligations of international ethics. The obvious appeals to them, as in fact it appeals to the bulk of the population in other countries. They know that Japan has defeated a German military force and has wrested from it what was to the Japanese man in the street a German possession. What more proper then, as a recompense for the blood and treasure expended in reducing Tsingtau, than the retention of Kiaochou? That, in all probability, is the viewpoint of the Japanese man in the street, and a Cabinet with a minority in Parliament must necessarily keep that fact in mind. We are of the opinion that Baron Kato's speech may be justly regarded as a piece of political window dressing. It is to be observed that while the pledges given to the world not to impair China's territorial integrity and to return the Protectorate were clear and unequivocal, the statement in the Diet in reply to an opposition member committed the Japanese Government to nothing, but by reason of its ambiguity was calculated to satisfy the unthinking jingoes who desire Japan to retain Kiaochou. The splendid spirit of the Samurai, who put honour before wealth and worldly advantage, even before life itself, we believe still guides the statesmen who are responsible for the conduct of Japan as one of the Sisterhood of Nations, and we confidently look to them when the time arrives to redeem their promises to the uttermost without the necessity arising for pressure from any quarter whatsoever. We prefer to believe that the following expression of opinion reflects the real spirit of the Japanese Government concerning its obligation to China and the world. Public replies in the Diet for political effect are one thing. The world knows how to gauge such utterances. For real common sense and an honest expression of Baron Kato's opinions, we commend to our readers the well merited rebuke he administered to a group of meddling politicians who apparently desired "strong" action against China. These vigorous remarks are logical, convincing, and bear the stamp of veracity. Unless future events compel us to change our views, we believe that in this "dressing down" administered to his jingo constituents, is reflected the true spirit of Baron Kato and the Samurai who still control the policy of Japan. The return of Kiaochow to China, is a matter which can only be considered after the termination of the war.

According to the *Nippon,* Messrs. Tanabe, Otake and Nakamura, of the Taishi Rengokai, an association of politicians professing to be interested in Chinese affairs, waited on Baron Kato, Minister of Foreign Affairs, the other day, and elicited from him the following remarks in reply to various views laid before him on Chinese questions:—

"I understand your intentions, but I must say that your views are not practicable in this civilized age. You must remember, first of all, that Japan waged the recent war, not against China, but against Germany, so that it is quite improper for her to prefer any heavy claims against China. Japan's policy towards China must always have in view the development of trade. In competing for the right to grant loans to China, the Powers are actuated simply by a desire to do profitable business. Your apprehensions that these creditor Powers will despatch troops when civil disturbances break out in China, on the pretext of protecting their rights, and that they will thus pave the way to territorial expansion, are not justified. I feel confident that Great Britain, for instance, will never assume any such attitude in China. So far as Japan is concerned, it must be her guiding policy to place her own affairs on the surest foundation before looking to any developmnet abroad, ever keeping in mind, of course, the cardinal importance of extending her trade. *You look upon China as if she were the treasure-house of the world, but you are greatly mistaken in this idea.* Germany's administration in Shantung Province has been a great failure, while Russia has gained very little success in Outer Mongolia. In fact, none of the Powers have ever been successful in China. It is, therefore, a forgone conclusion that Japan can achieve no brilliant success where other countries have failed. This point calls for serious study in formulating our policy towards China. As regards the settlement of the Manchurian and Mongolian questions, I hope you will leave everything in my hands. You clamour for land ownership rights in China, but beside the lands attached to the railway in Manchuria, Japanese subjects are engaged in cultivating land leased by the Chinese. Under these circumstances, the withholding of land ownership rights constitutes no ground for complaint. In my opinion this procedure is sufficiently effective in colonial expansion. In Manchuria there are no important mines and the acquirement of any right to work them would serve little for purposes of immigration."

"The future of Tsingtau and various questions in connection therewith, will be solved at the Peace Conference to follow the war, and the present is by no means a fitting occasion to discuss them. *The Shantung Railway is, needless to say, a private enterprise, and Japan is simply in temporary possession.* Judging from the business reports of the Railway, the undertaking has been a failure. Various mines in the province have also been duly investigated by the Japanese authorities, but none have been found promising as business schemes. The question as to whether Japan will return to the original owners what she now occupies in Shantung province is one that must be left for future consideration."

CHINESE VERMICELLI INDUSTRY

Vermicelli is made from the small green bean (lü tou) in the Ninghai and Fushan districts, in the vicinity of Chefoo, to the south and west, there being one factory in Chefoo in connection with the Hwa T'ai silk filature. Large quantities are made by individual farmers in these districts, but more is made in the little family factories scattered all over this territory. The farmers in Fushan buy their beans in Chefoo, as the soil in this district will not raise a good crop of the green bean; while those living in Ninghai raise their own. These two districts are divided by a low range of hills; Ninghai being on the sea and having a sandy loam and Fushan having a loess soil.

The beans grow upon the ordinary bean bush and are harvested about the first of September, yielding from 250 to 450 pounds of beans per mou (733½ square yards), or between 1 and 2 piculs (picul = 133 pounds) of vermicelli. They are separated from the pods on a primitive thrashing floor by the use of flails, and winnowed by being thrown up in the air by wooden shovels for the breeze to curry off the chaff. The process is divided into two distinct stages, viz, the bean meal molds and the finished product, the two stages requiring about an equal division of time.

THE FIRST AND SECOND STAGES

After thrashing, by a process of boiling and repeated washing the skins are separated from the white meat of the beans, which are then ground in the primitive millstones. Then, by a further process of straining, cooking in cloth bags, draining, and cooling, the first stage of the process results in the appearance, upon a long bench outside in the sun, of a number of pear-shaped snow-white bean meal molds, having diameters at top and bottom of 8 and 12 inches, respectively. This is the invariable sign (and the only one to a stranger) of the exact location of a vermicelli factory—the long white lines of the drying product, mentioned below, serve as a general guide at a distance.

After drying, the molds are brought in and crumbled to a dry powder. A little is thoroughly mixed in cold water and about half a pint of the mixture is poured into about twice as much boiling water and whipped into a gelatinous mass, in order to bring out the starch, and then dumped into a large pot of water which is kept up to the boiling point. After eight or ten of these masses have been made, the number depending upon the amount of vermicelli desired, they are separately dipped out in a small amount of the boiling water and again whipped until the water has been absorbed. These starchy masses are then in turn dumped into a large k'ang (earthen jar) containing pulverized bean meal, with which they are thoroughly kneaded to the consistency of dough, the starch and meal being gradually added during the kneading process until all the starch has been used. A workman then takes a sitting position at the edge and above the large pot of boiling water, holding the handle of a brass-bottomed 10-inch colander, the other side of which is suspended by a wire 18 inches above the boiling water.

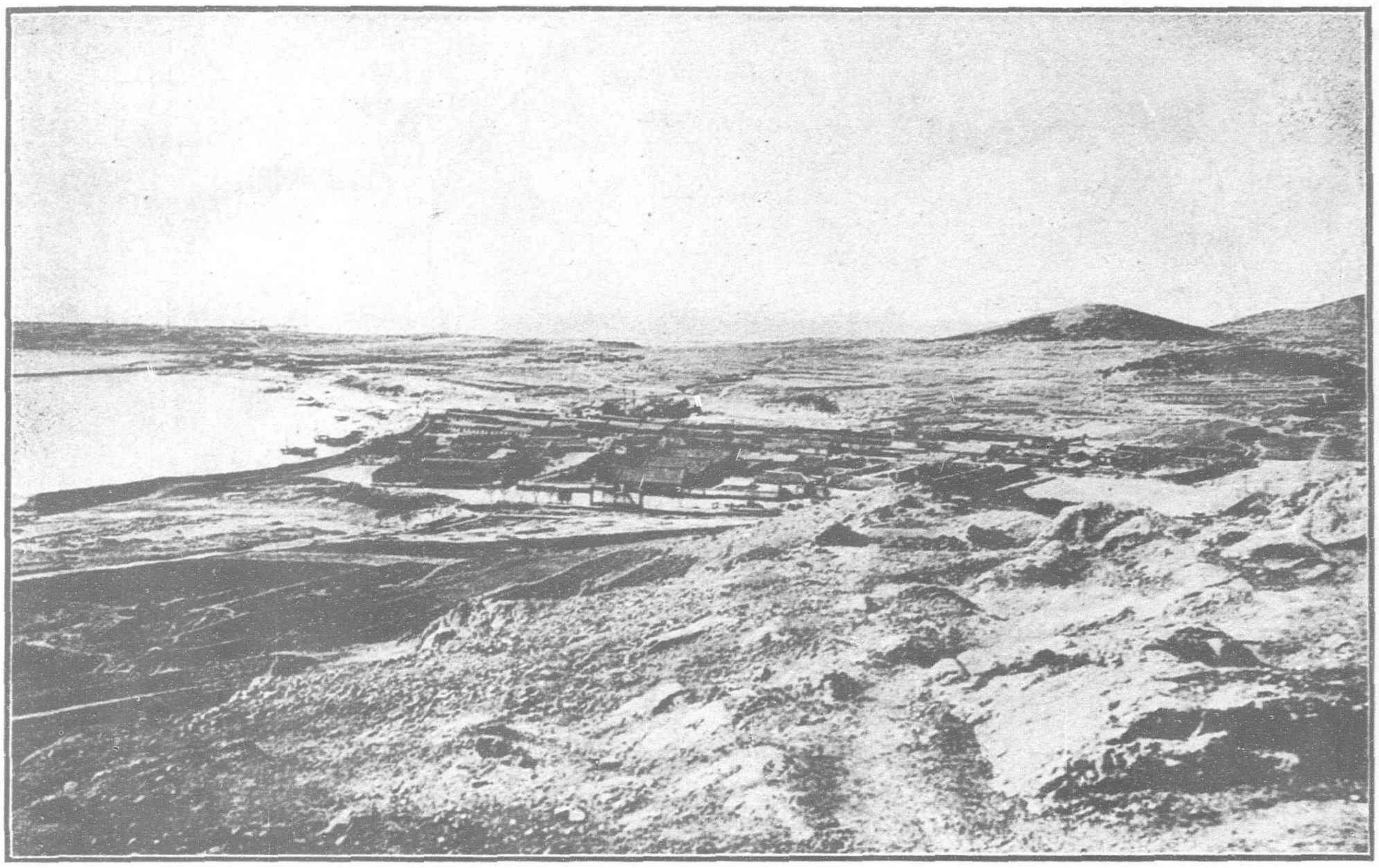
FINAL OPERATIONS AND PROFITS

A ball of dough is tossed into the colander and forced through by striking it with the palm of the hand. The little slender strings of dough trail down into the boiling water and are guided on over the edge of the vessel into two lower vessels consecutively arranged and holding cold water, from the last of which they are collected into bundles of strings and strung upon short sticks in 4-foot lengths and hung up to drip. Two piculs of vermicelli are thus made at one sitting.

When the dripping frame has been filled the partially dried strings are hung outside of the village to be thoroughly dried in the sun. At a distance these 200-foot lines have the appearance of lines of white clothes. The product is then packed in burlap bales of 1 picul each and taken to the market on pack animals, 2 bales to the animal, where it is sold to the wholesale dealers at $4 to $5 per bale, who in turn export it at an advance of about 100 per cent in price. The quality of the products is regulated by the amount of starch and adulteration by sweet potatoes or kaoliang, the adulterated product being the cheapest.

In making 1 picul of vermicelli the manufacturer uses about $6 worth of beans; but these farmers who make vermicelli and sell it for less than they could get for their beans make their profit from the chaff and harvested fields upon which they fatten their catle, and the waste upon which they fatten their hogs and fertilize their land, and which is considered a superior fertilizer to the silk chrysalis, which sells at 2 cents per pound. The buy-products of a picul of vermicelli amount to about $3, thus giving a nominal profit of from $1 to $2 per picul, which represents three days' labor of four men.

Of the total export of vermicelli about 73 per cent is shipped from Chefoo, Hongkong and Straits Settlements taking about 86 and 6 per cent, respectively.



The old mud-walled Chinese fishing village of Tsingtau, which the Germans have developed into the present magnificent modern settlement and stronghold.

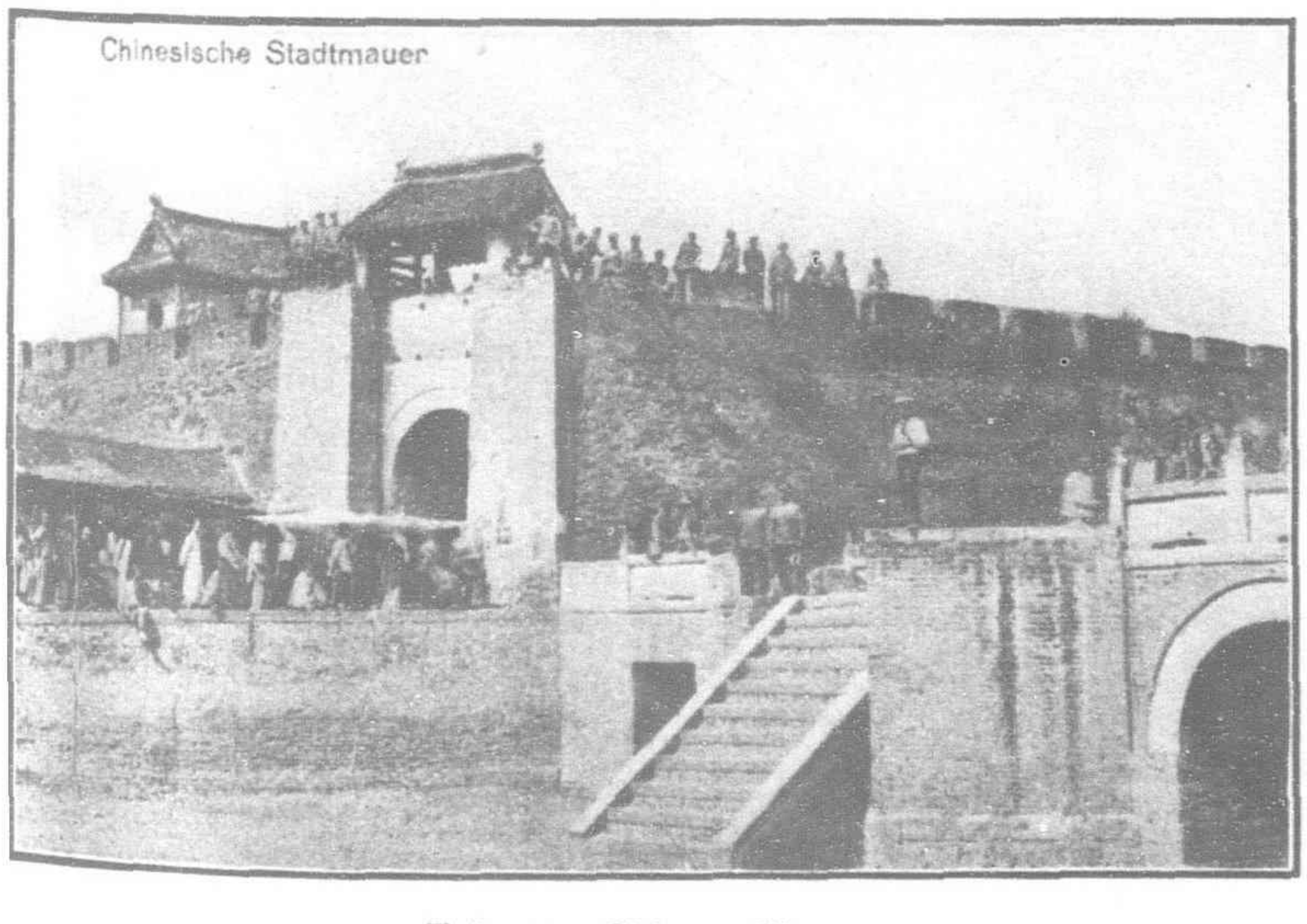
TRADE OF TSINGTAU

The commercial situation at Kiaochou last year is to be regarded as satisfactory, on the whole, from the German point of view. There was an increase in the gross and net values of trade, although in the case of exports the gain was more apparent than real. The substantial increase in imports was the result of a higher purchasing power caused by abundant crops. Extensive building continued, the result of the enormous land sales of 1912. The Government slaughterhouse enjoyed a record year in the number of animals slaughtered. The Shantung Railway also had a record year in both passenger and freight traffic. The population, both Chinese and foreign, showed a substantial increase since the last census (1910). While one of the two coal mines under German management has not been successful, the other is a fair producer, and recent discoveries of rich iron ore give promise of the establishment of a thriving industry in the near future. The political troubles of 1913 had some effect on trade, shippers not caring to risk shipments abroad by way of Shanghai.

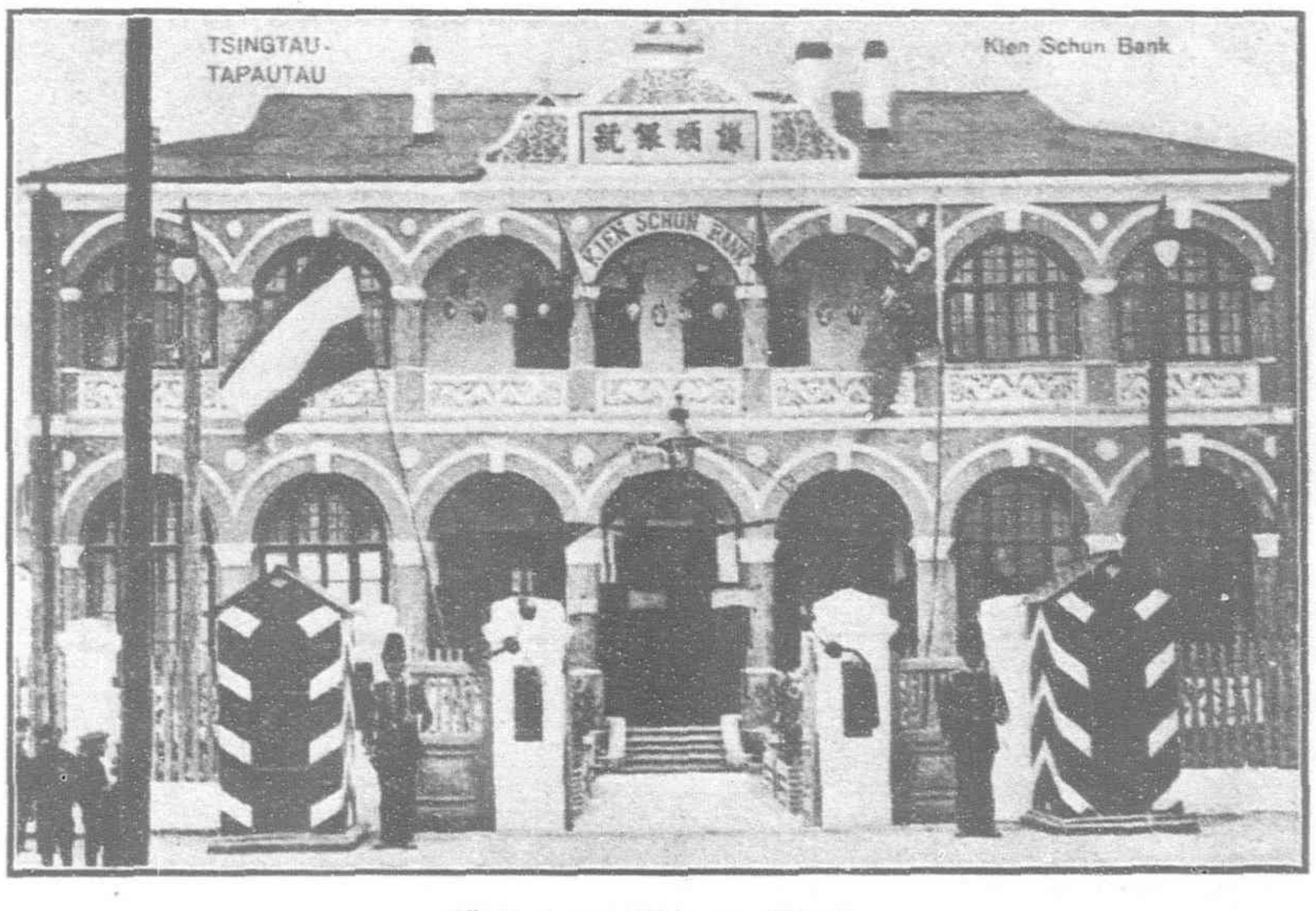
INCREASE IN POPULATION.

The population of Kiaochou, the German protectorate (Schutzgebiet), in which Tsingtau is situated, was estimated to be 191,984 in 1913, as compared with 167,224 in 1910, showing an increase of nearly 15 per cent in three years. The population of the city of Tsingtau was 60,484 according to the census taken in July, 1913, and 40,264 in 1910, classified as follows:

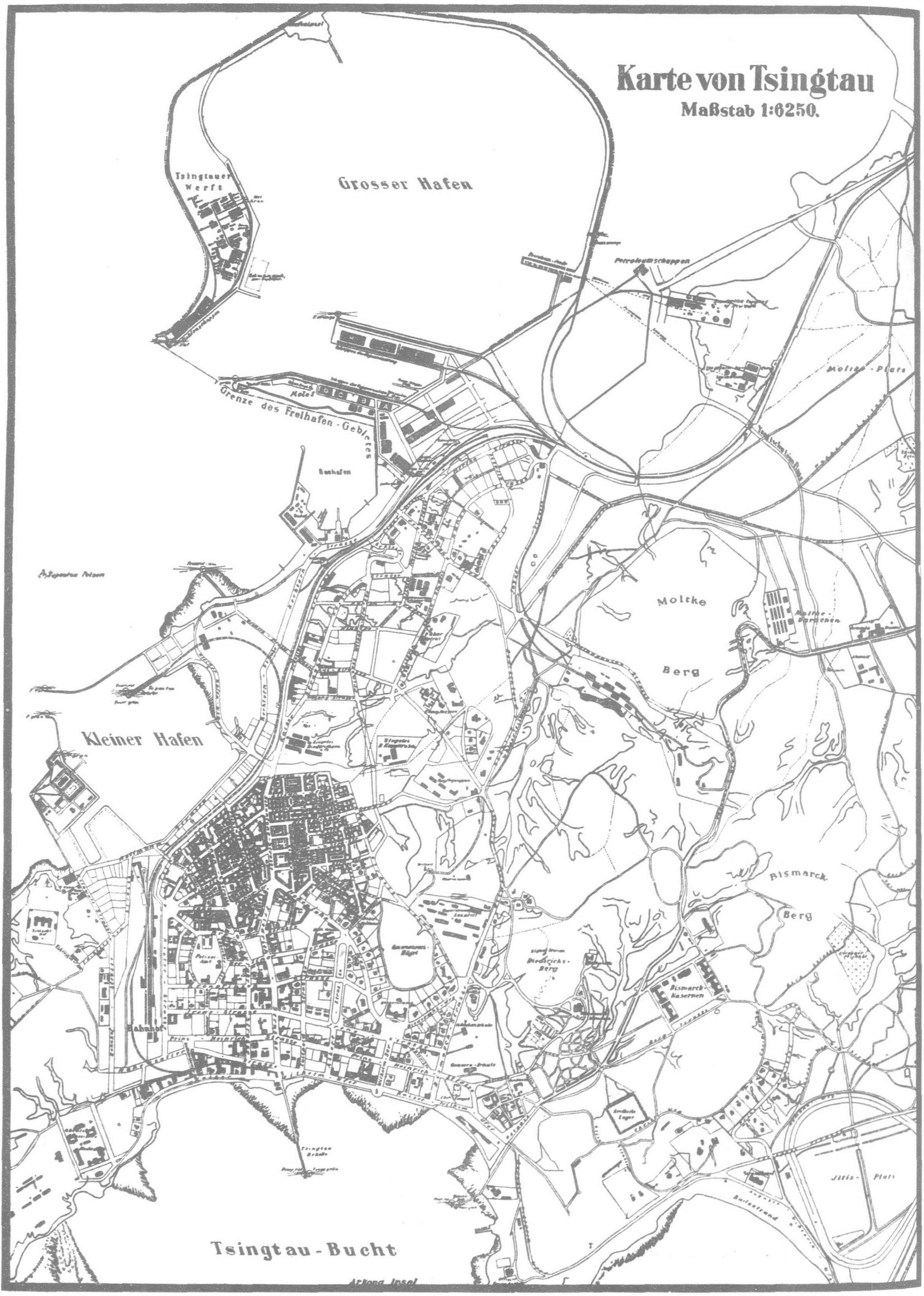
Classification.	1910	1913	Increase in 3 years.
European and American	1,621	2,069	448
Military	2,275	2,401	126
Chinese	36,180	55,672	19,492
Japanese	167	316	149
Other Asiatics	21	26	5
Total	40,264	60,484	20,220

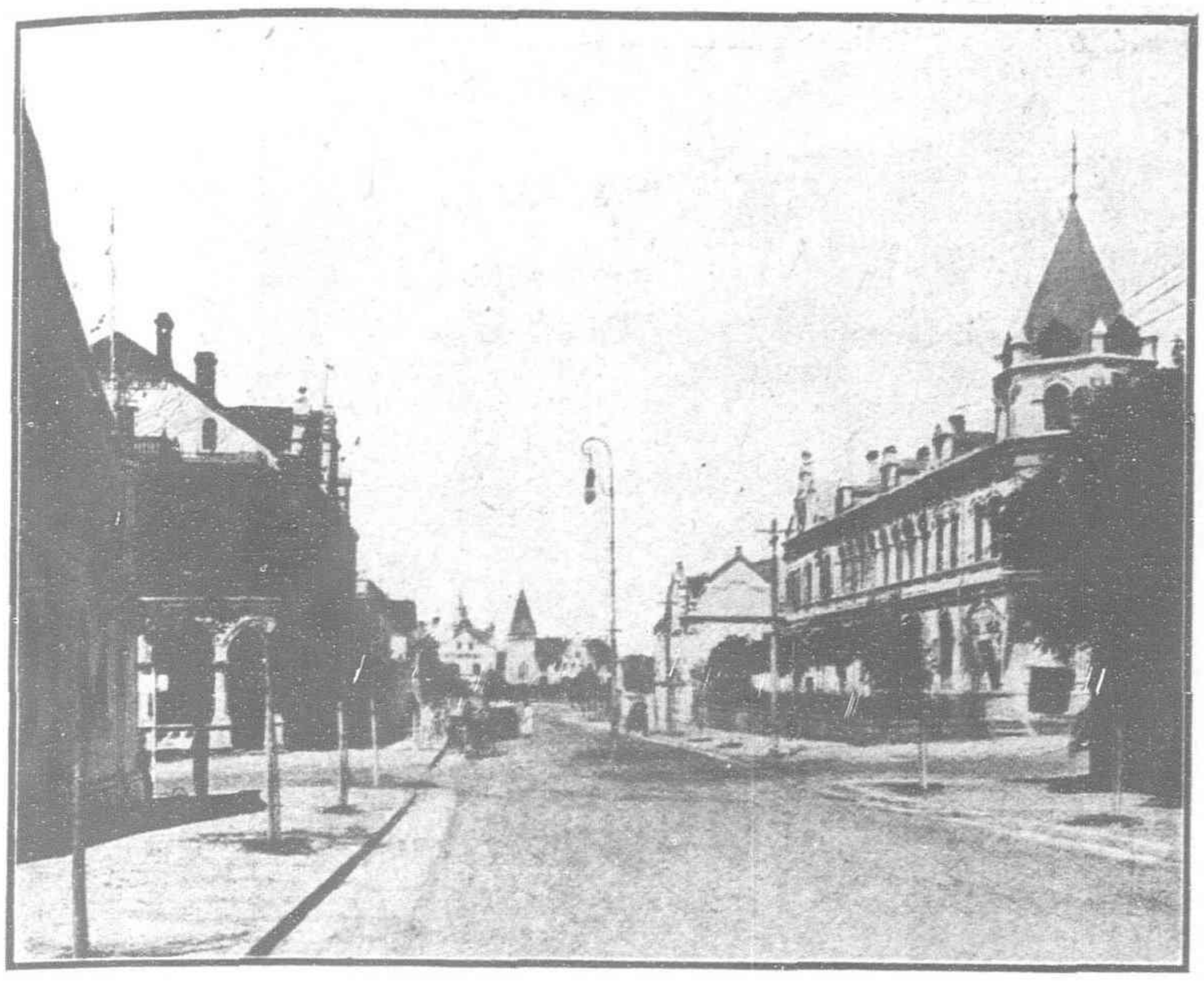


Tsingtau, Chinese City.

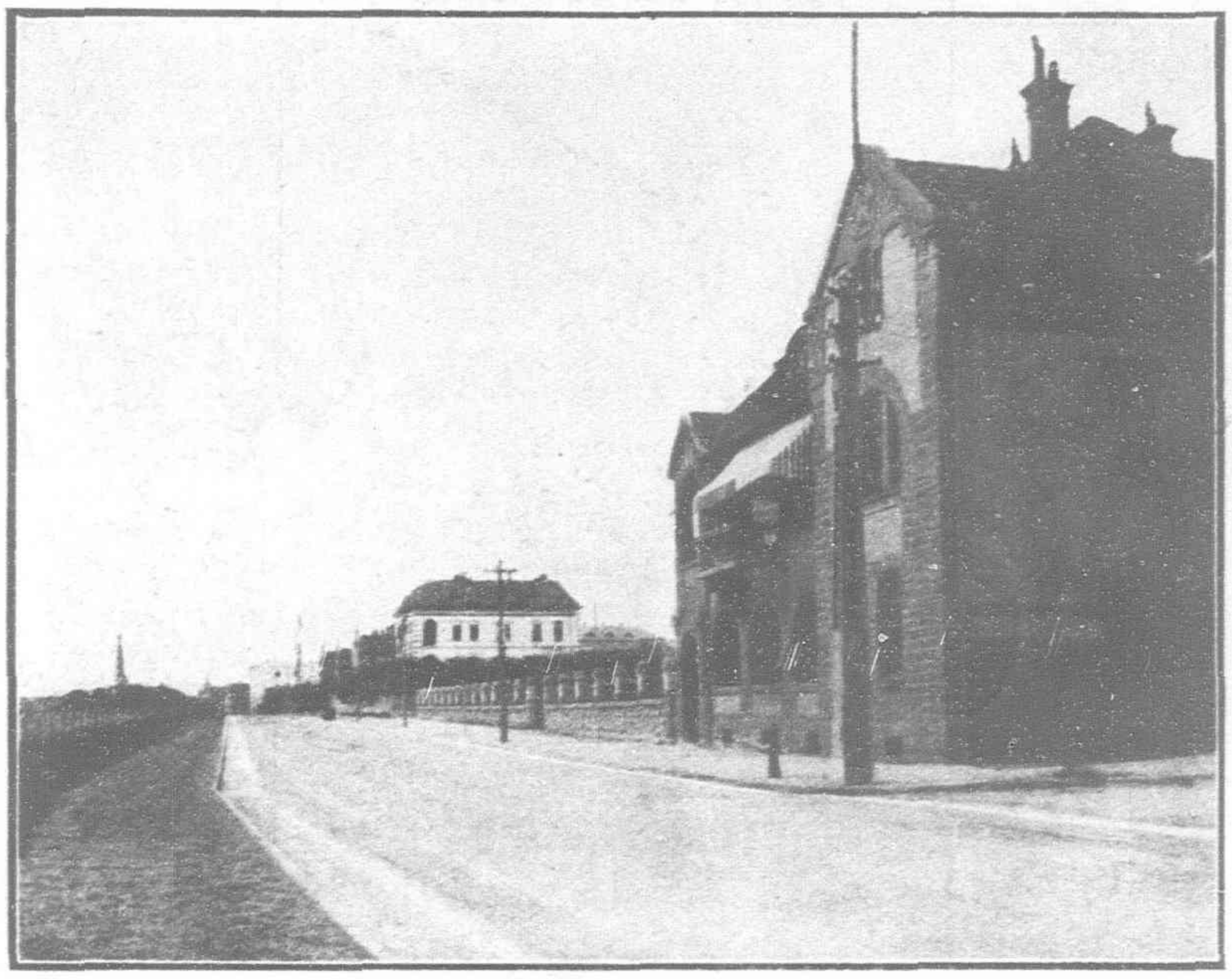


Tsingtau, Chinese Bank.


Karte von Tsingtau
Maßstab 1:6250.
Grosser Hafen
Tsingtauer Werft
Petroleumschuppen
Mole I
Grenze des Freihafen-Gebietes
Moltke-Platz
Moltke Berg
Moltke-Kasernen
Kleiner Hafen
Bismarck-Berg
Bismarck-Kasernen
Diederichs-Berg
Bahnhof
Prinz Heinrich Strasse
Tsingtau Brücke
Artillerie Lager
Iltis-Platz
Tsingtau-Bucht
Arkona Insel



TSINGTAU: Hohenzollern Road, with Railway Station in Background.



Kaiser Wilhelm Street.

The nationalities represented among the 2,069 Europeans and Americans in the city in 1913 were: German, 1,855; Russian, 61; British, 51; American (United States), 40; French, 15; other, 47.

While the Europeans and Americans increased 27.6 per cent. during the three years the Chinese increase was 56 per cent. About 33 per cent. of the former were under 20 years of age; 56.5 per cent. were between 20 and 45. They were distributed by sex as follows: In 1910, 979 males to 642 females; in 1913, 1,183 males to 886 females. The Chinese population within the city limits of Tsingtau was distributed as follows:

Census.	Over 10 years.		Under 10 years.	Total.
	Males.	Females.		
1910	28,127	3,804	2,249	34,180
1913	40,115	8,573	4,624	53,312
Increase in 3 years	11,988	4,769	2,375	19,132

This increase testifies to the rapid growth of Kiaochou. The Chinese within the city number 53,312, almost 56 per cent. more than in 1910. Within the last three years many wealthy Chinese went to this port as a result of the political disturbances of 1911 and 1913. There are about 40 Americans in the district, mainly missionaries and employees of the British-American Tobacco Co.

TSINGTAU AS A RESORT.

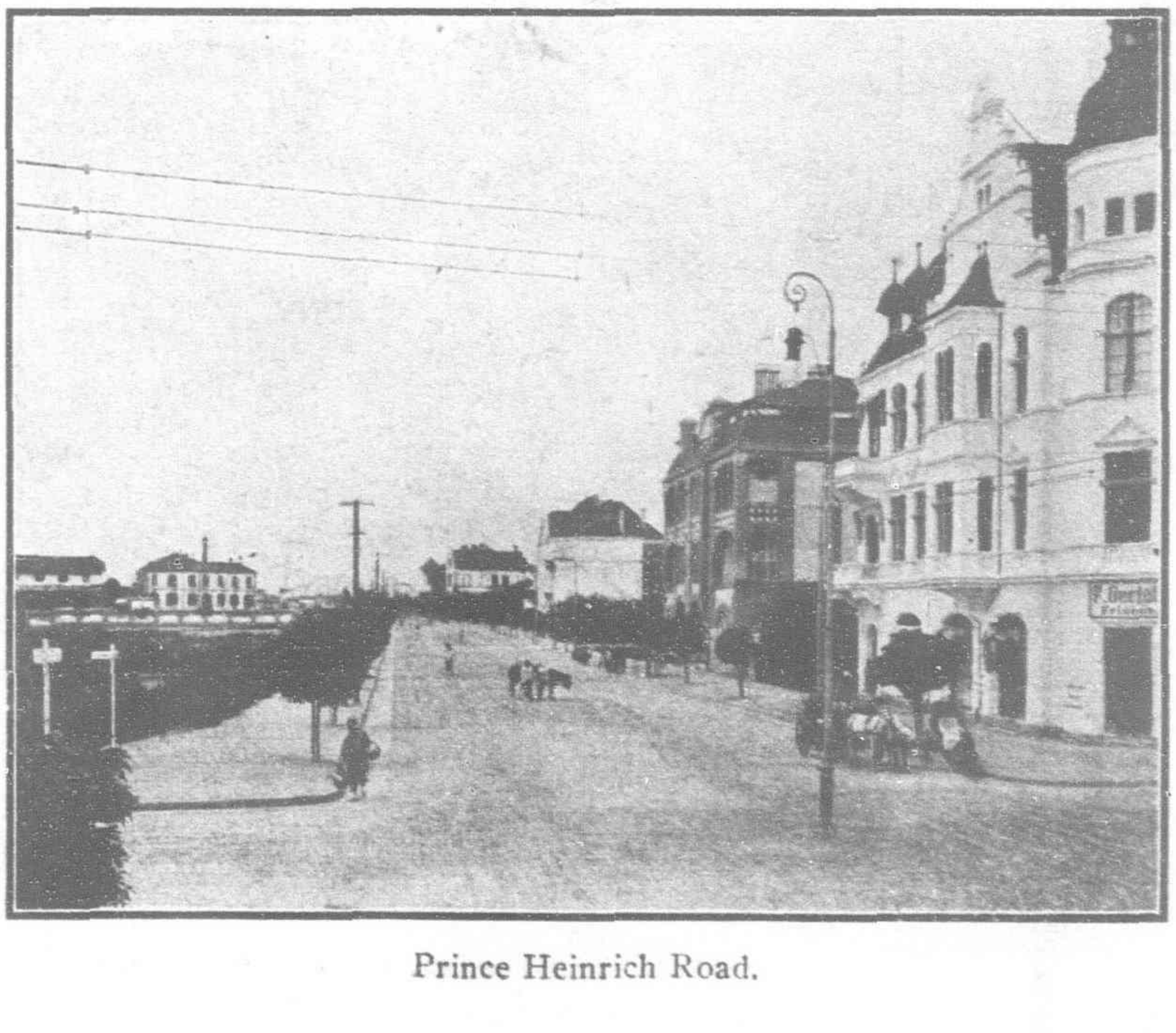
The Germans have heretofore evidently been bending all their energies to make Tsingtau the most popular resort of China, and have met with considerable success in the past. They have expended millions in improvements of all kinds. During the summer of 1913, the best two hotels raised their prices, and there was a falling off in the number of visitors, but on May 1, 1914, more than one-half of the hotel rooms were engaged for the summer. Tsingtau is being extensively advertised all over China.

LAND SALES AND BUILDING.

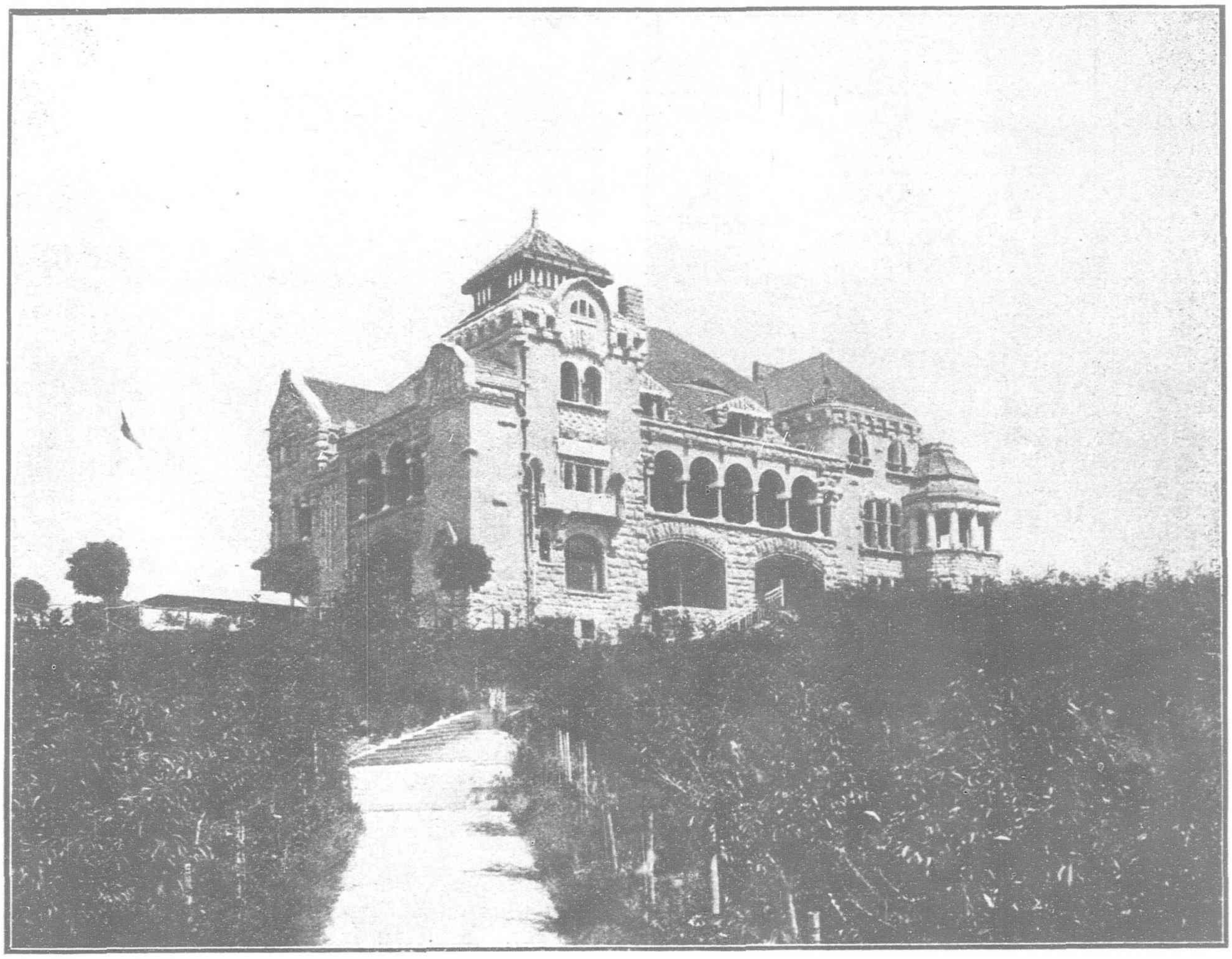
The numerous sales of land reported in 1912 fell off about two-thirds in both total area and value during last year. This is the result of the fact that the best lands have been acquired on speculation, leaving much less of the desirable grade on the market. In 1913 there were only 40 sales of land, amounting to 757,828 square feet, for $59,704 gold. In the preceding year there were 131 sales, covering an area of 2,889,701 square feet, at a price of $181,159.

The following statement shows that extensive building continued unabated in 1913 as a result of the numerous land sales of the preceding year:

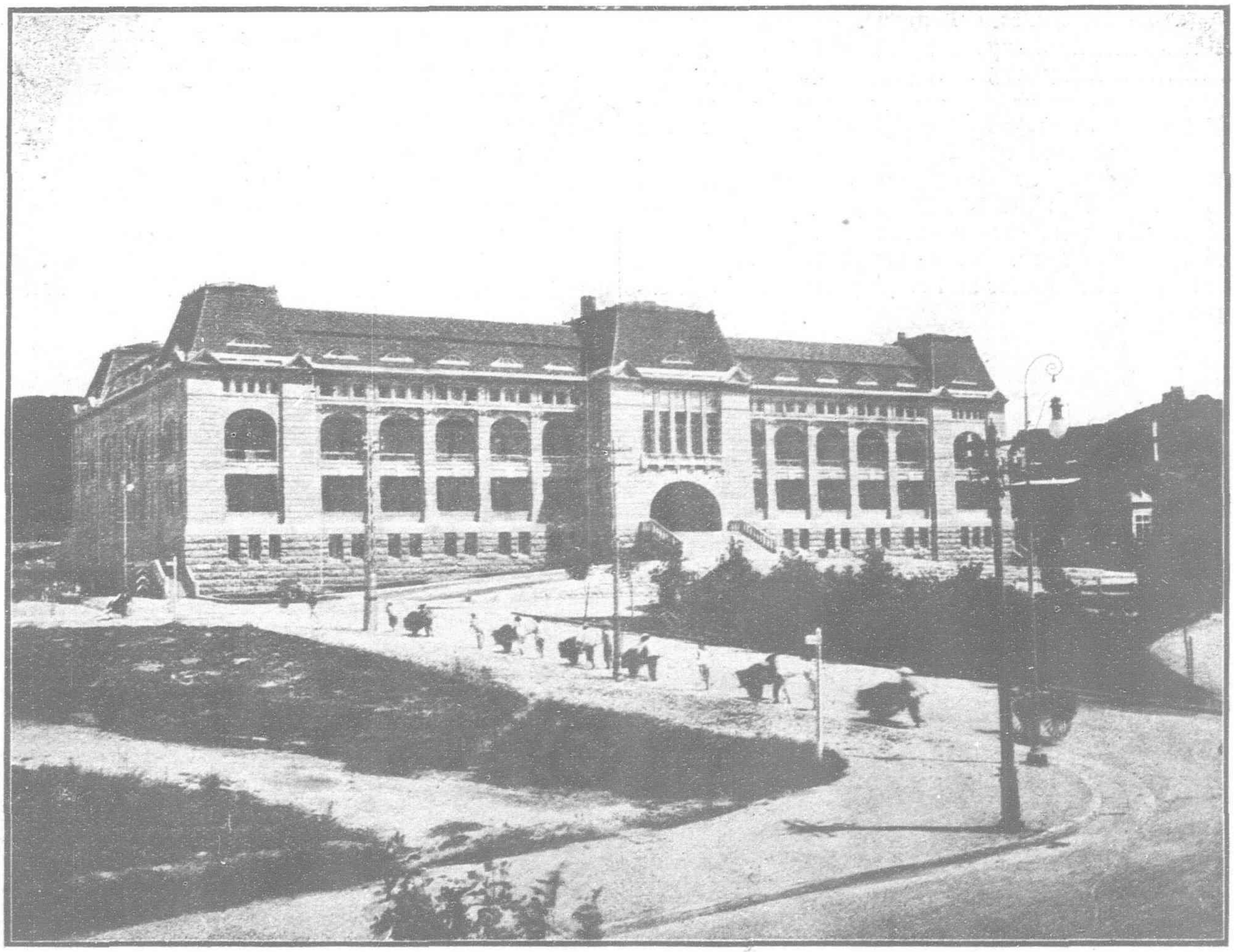
TSINGTAU: Prince Heinrich Road, Post Office in Foreground.



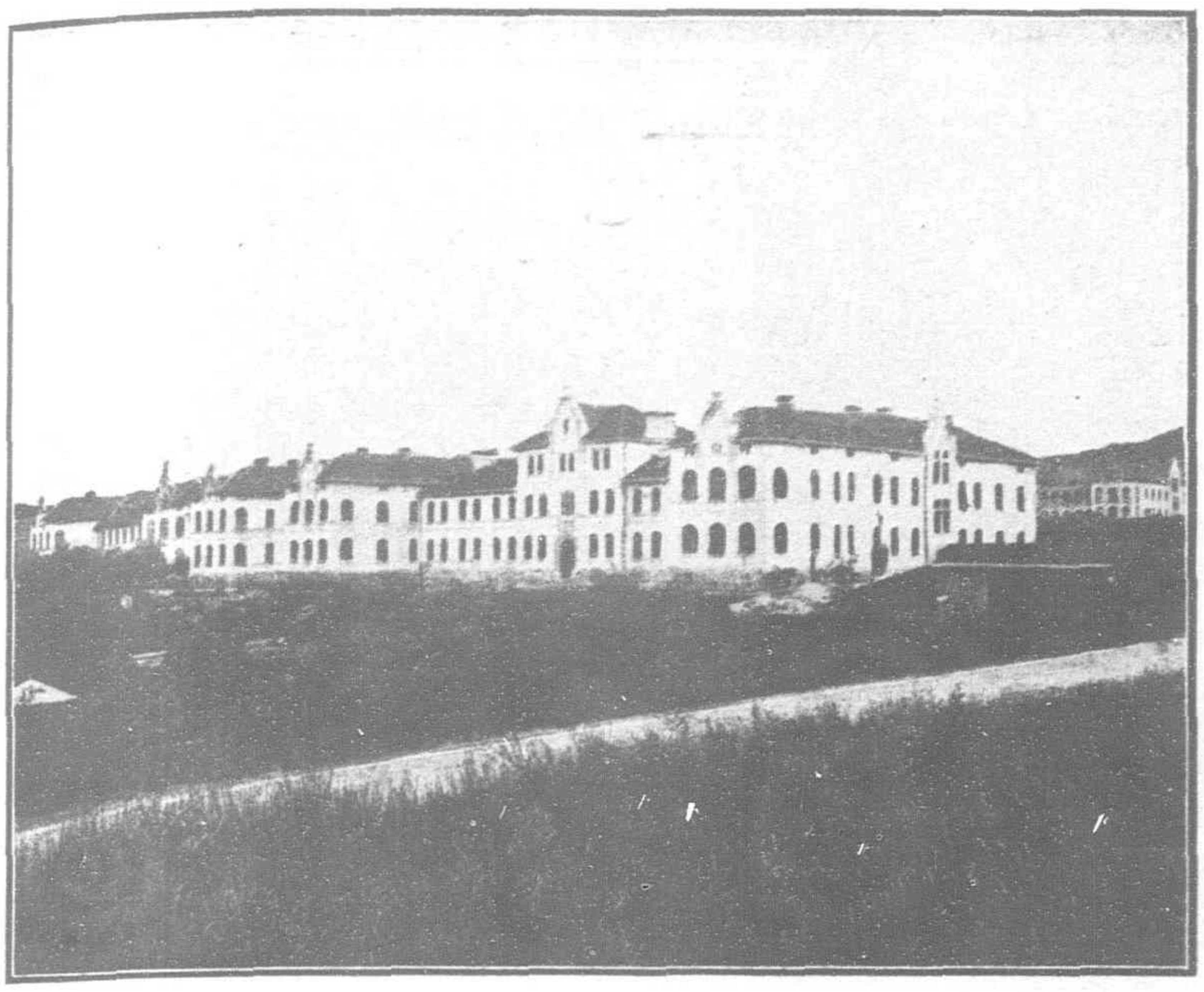
Prince Heinrich Road.



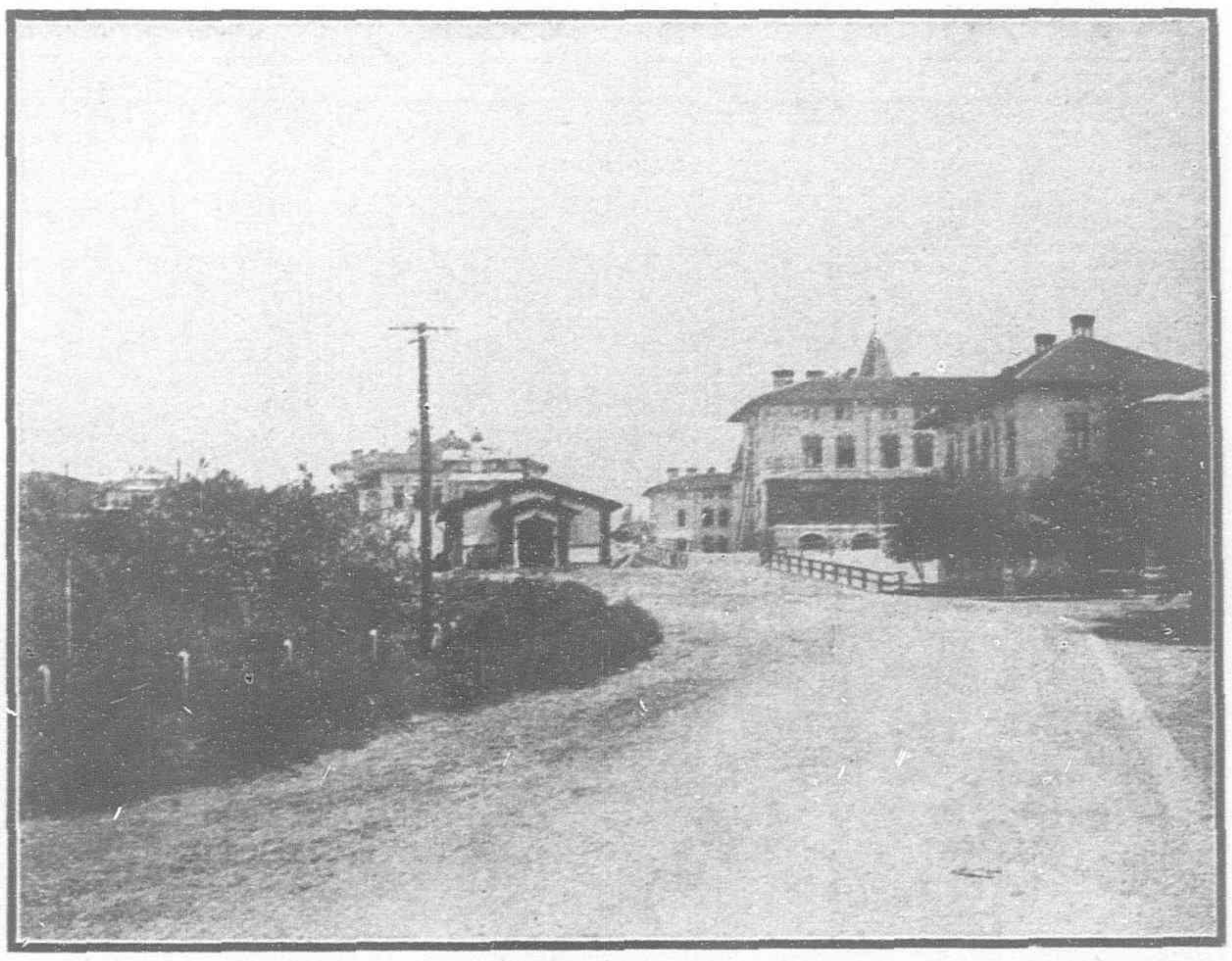
TSINGTAU: The Governor's Residence.



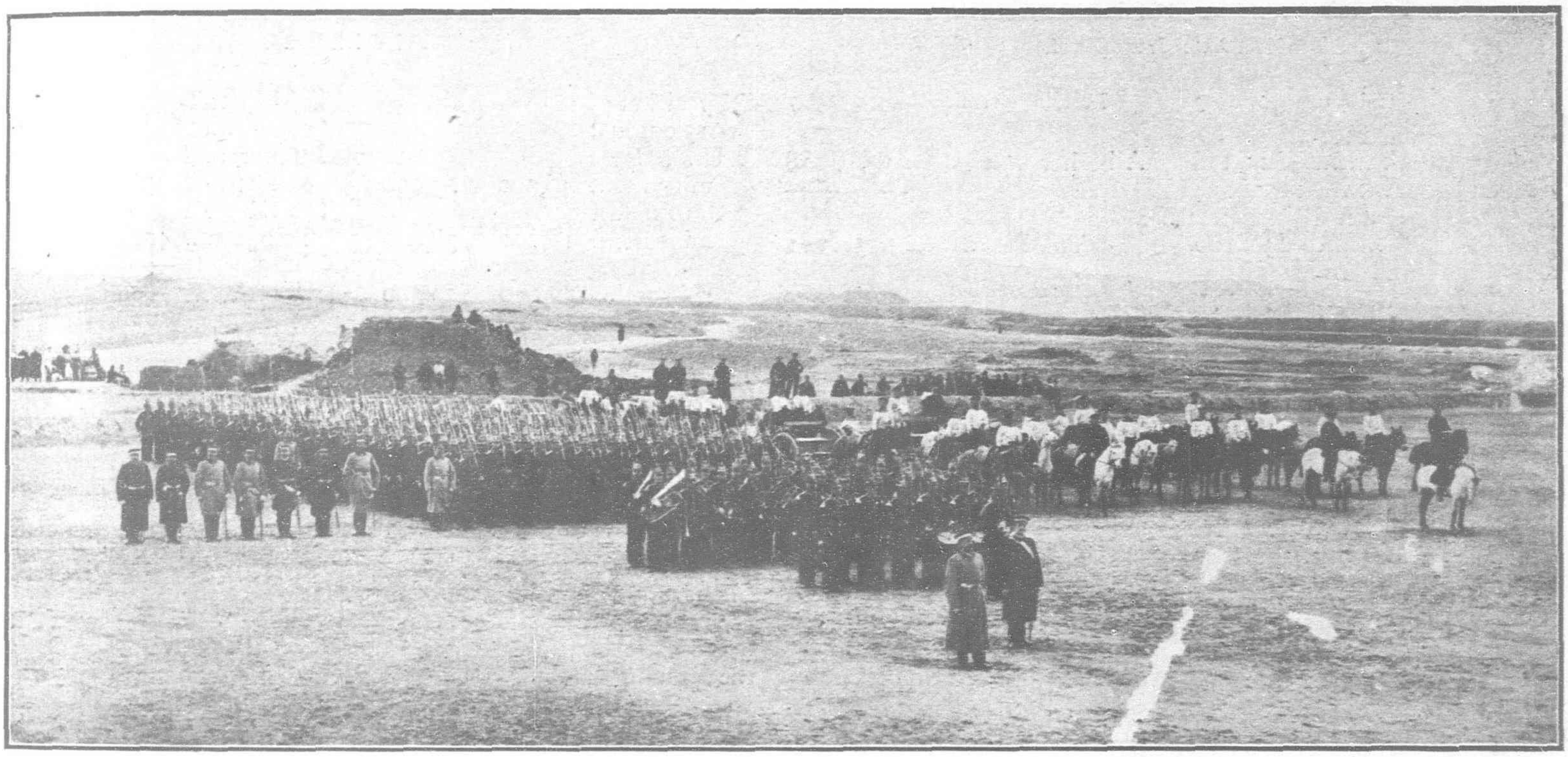
TSINGTAU: The Government Building.



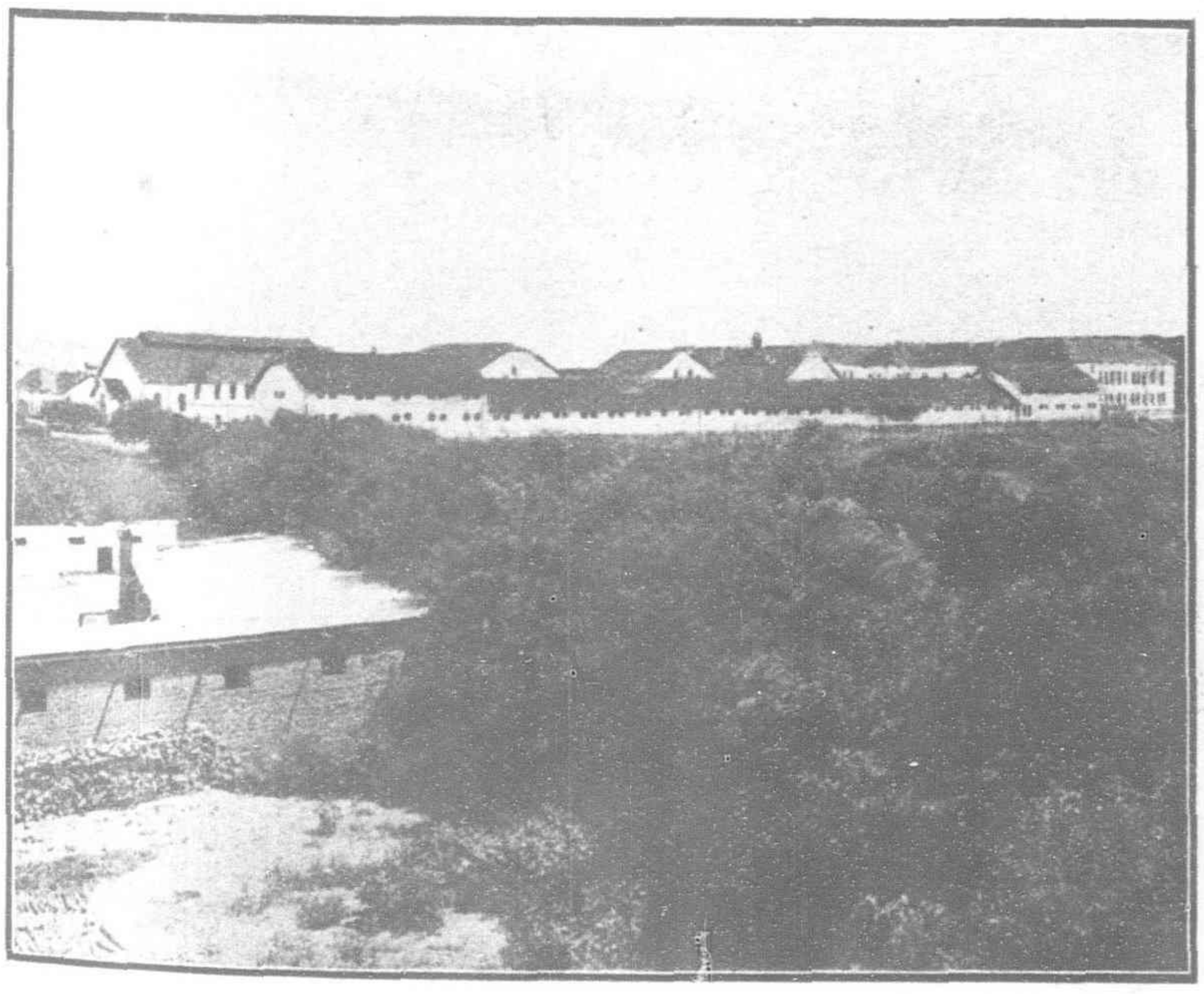
Bismarck Barracks.



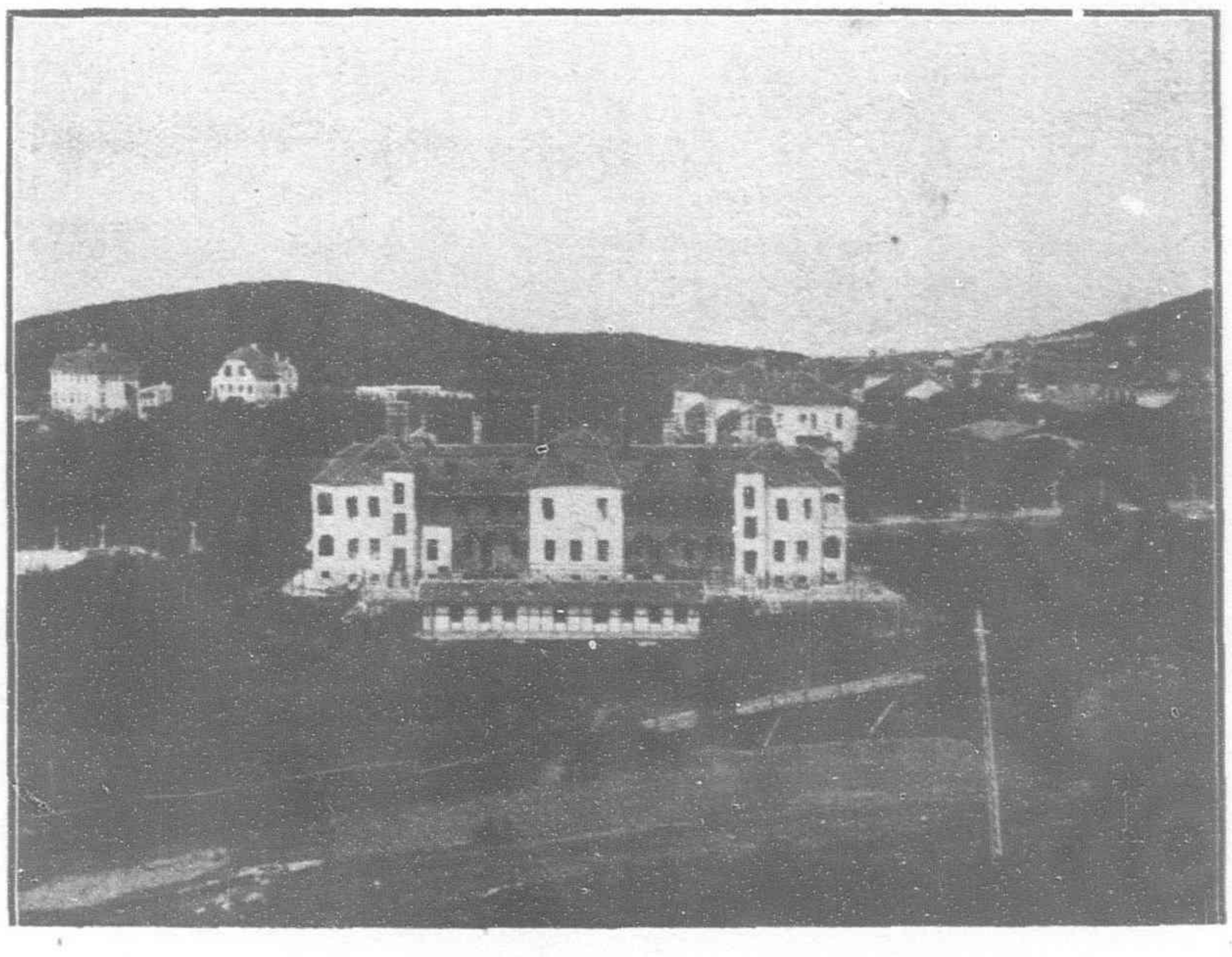
The Iltis Barracks.



German Troops on Parade.



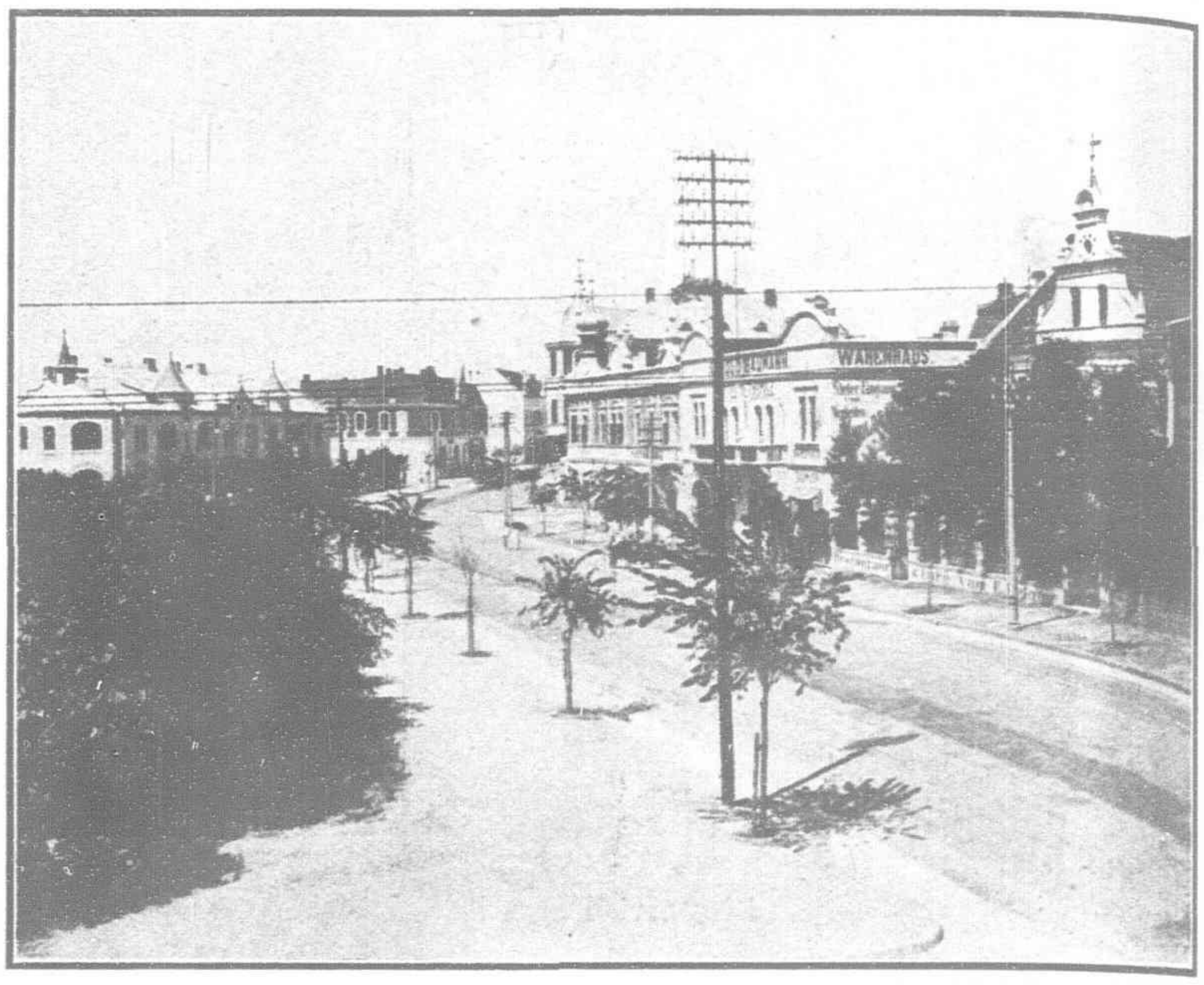
Moltke Barracks.



The Government Hospital.

VIEWS OF TSINGTAU.

TSINGTAU: Irene Road.



Friedrich Road.

Building permits.	1912	1913
Dwellings and business places	182	178
Outbuildings	127	134
Warehouses and workshops	64	100
Additions and remodelings	95	141
All other	127	128
Total	595	681

The number of permits for warehouses and workshops and for dwellings and business places is worthy of note. There is every incentive for the improvement of property in Tsingtau, as the tax on unoccupied land is high.

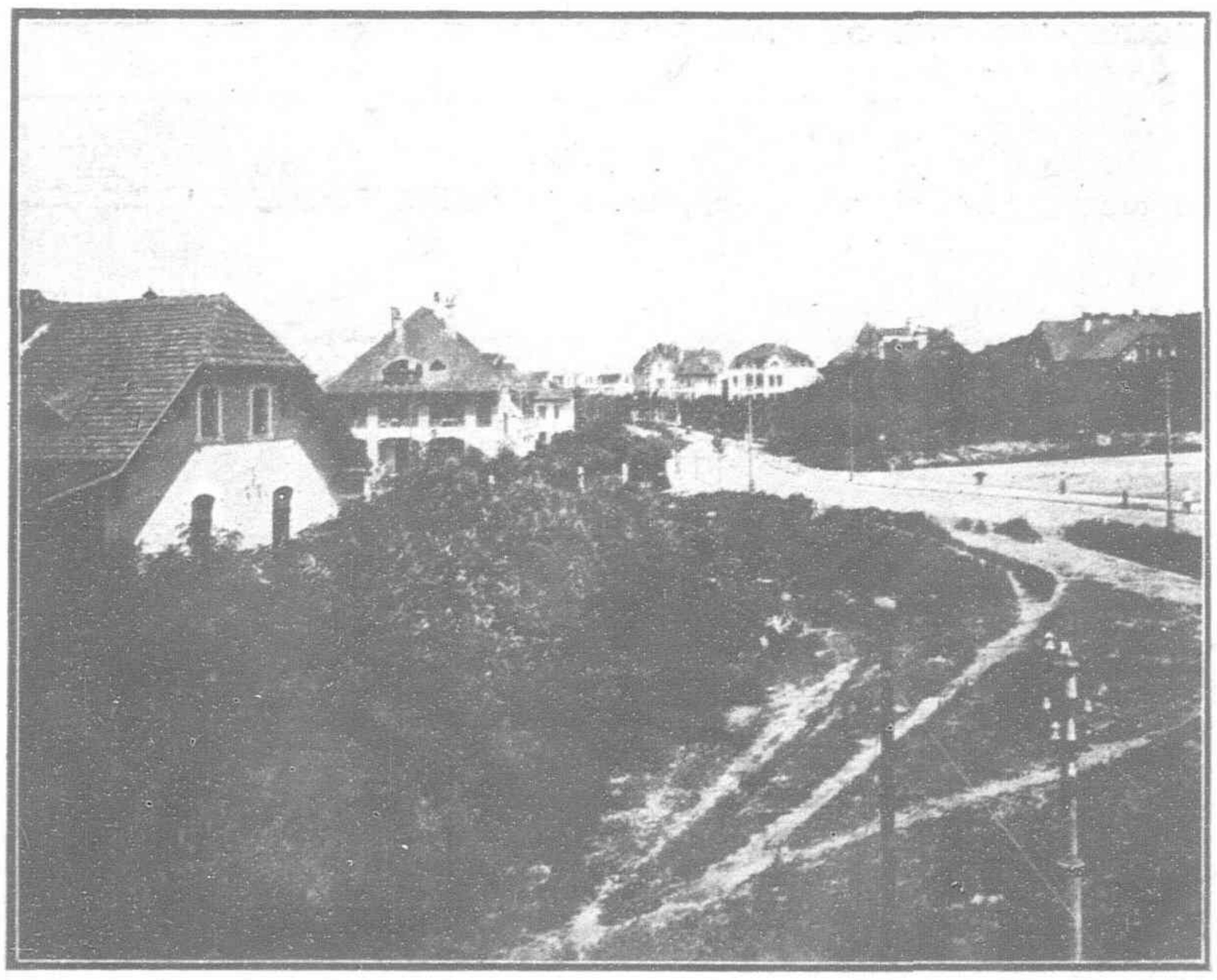
COAL MINING—IRON.

The following table shows the output of coal and its disposition at the two local coal mines—the Fangtze and the Hungshan—the property of the Shantung Mining Co.:

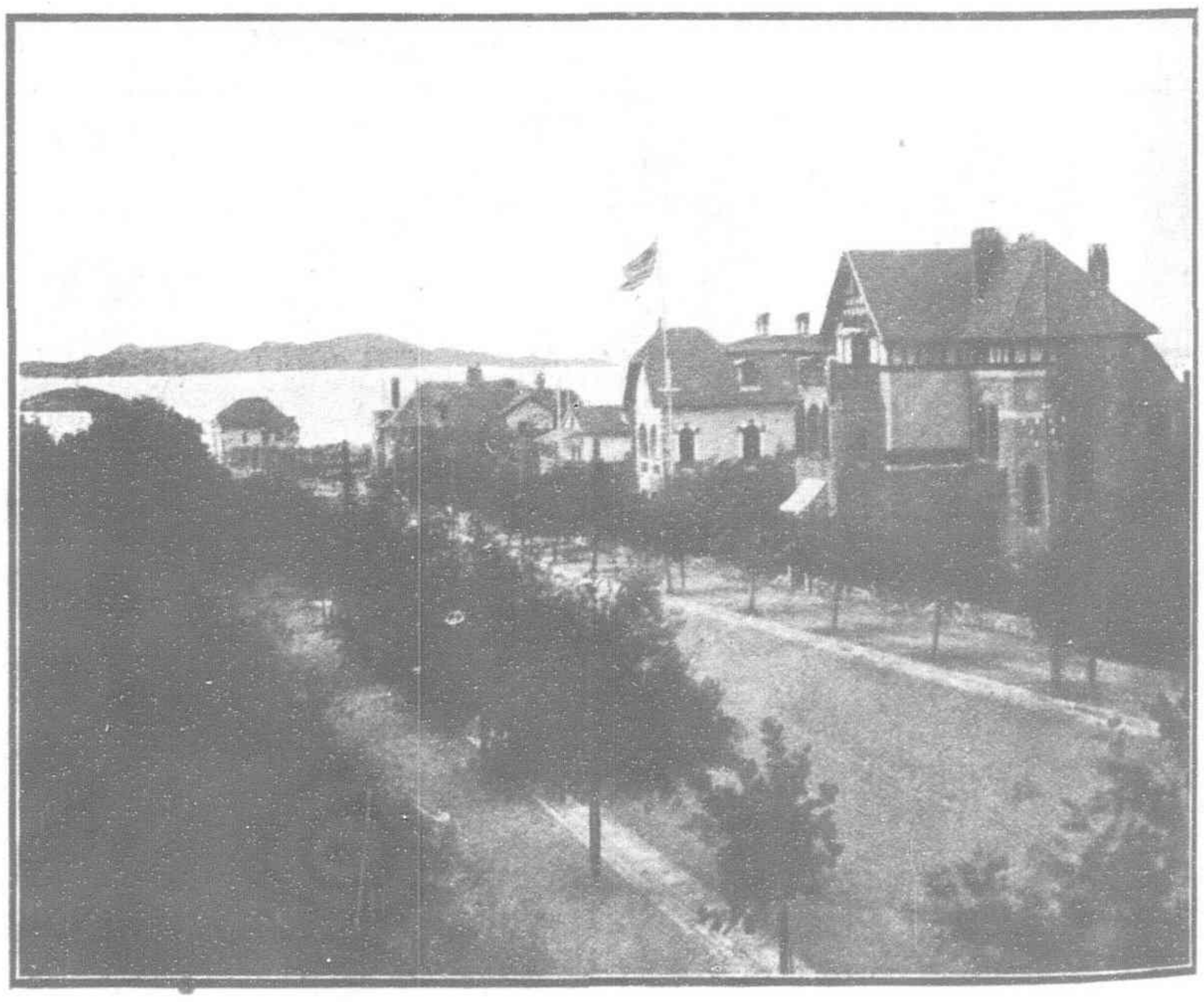
Output and disposition.	Fangtze mine.	Hungshan mine.
Output:	*Tons.*	*Tons.*
1912	199,073	374,604
1913	178,600	370,000
Disposition of 1913 output:		
Used at mines	49,200	27,200
Sold at mines	16,200	38,000
Sold along railroad	52,100	110,300
Sold to railroad	14,500	19,500
Bunker and export	5,000	165,000
Sold in Tsingtau	41,600	10,000
Total	178,600	370,000

The Fangtze mine has shown a general decline since 1909, when it was at the high-water mark of its prosperity. It is becoming more difficult to work, showing signs of exhaustion, and it will be noticed that 49,200 tons of the 178,600 tons extracted were used in the mines themselves. The output of the Hungshan mine was approximately the same as that of the year before. As the crops were exceedingly good, a cheap fuel has been supplied to the Chinese to the detriment of the coal interests.

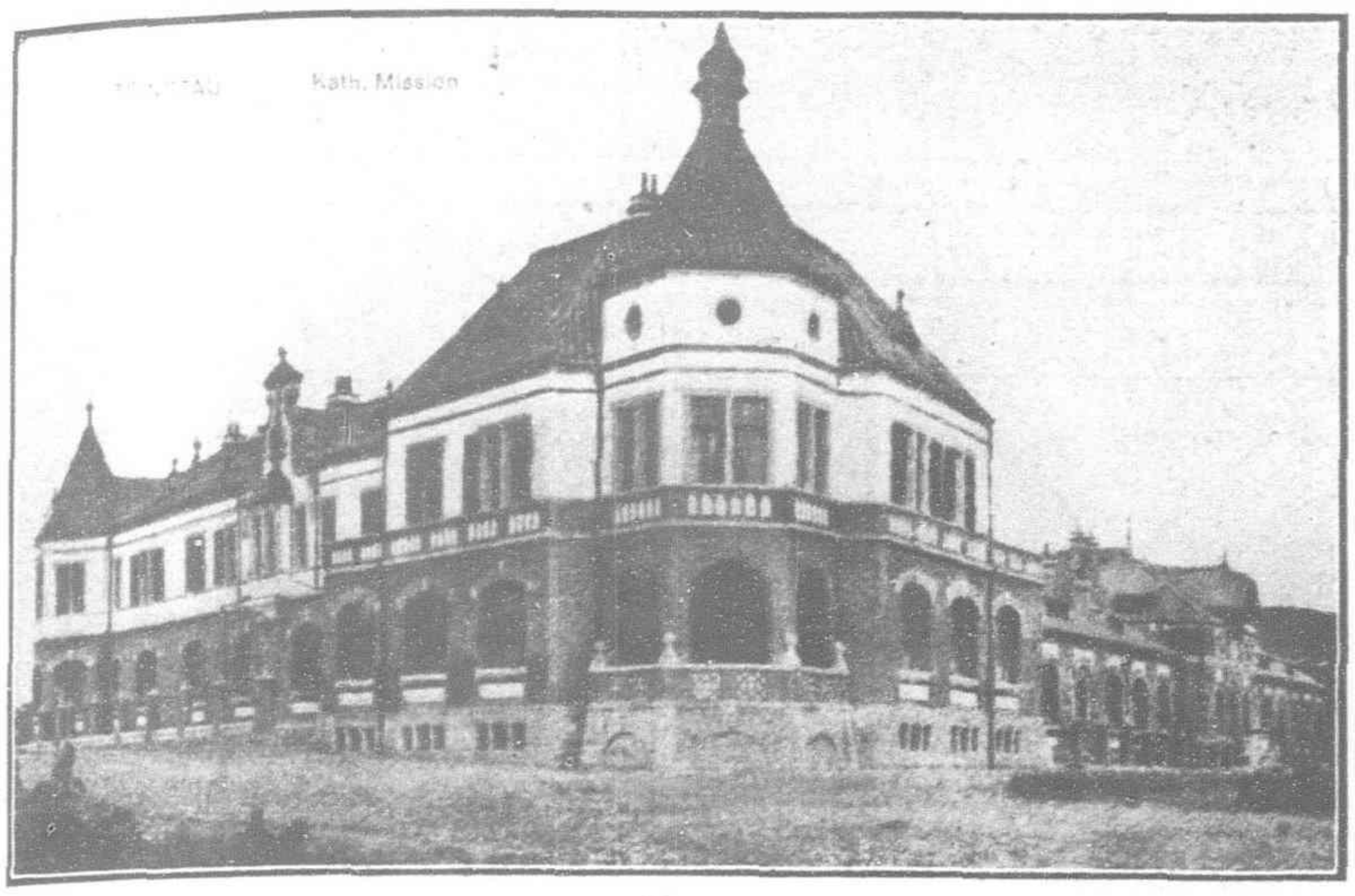
In January, 1913, the Shantung Railway Co. took over the Shantung Mining Co. Mining shares having depreciated on account of the lack of success of the Fangtze, the railway allowed $1,285,200 in railway shares at par value to the stockholders of the mining company for their $2,856,000 of mining stock. It was hoped that the Shantung Railway Co., with its advantages of transportation to and from Tsingtau, would make the mines pay.



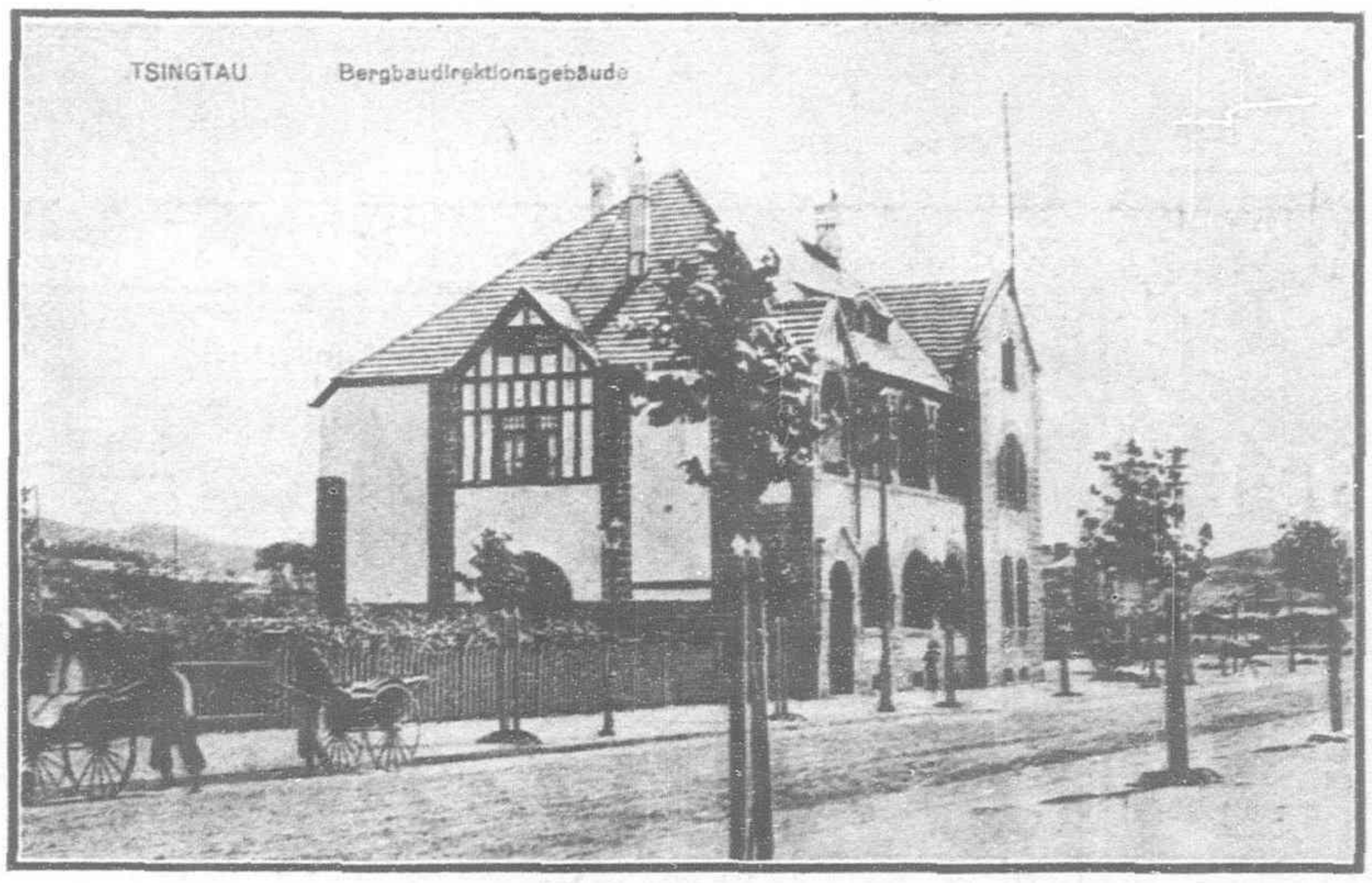
TSINGTAU: Hohenlohe Road.



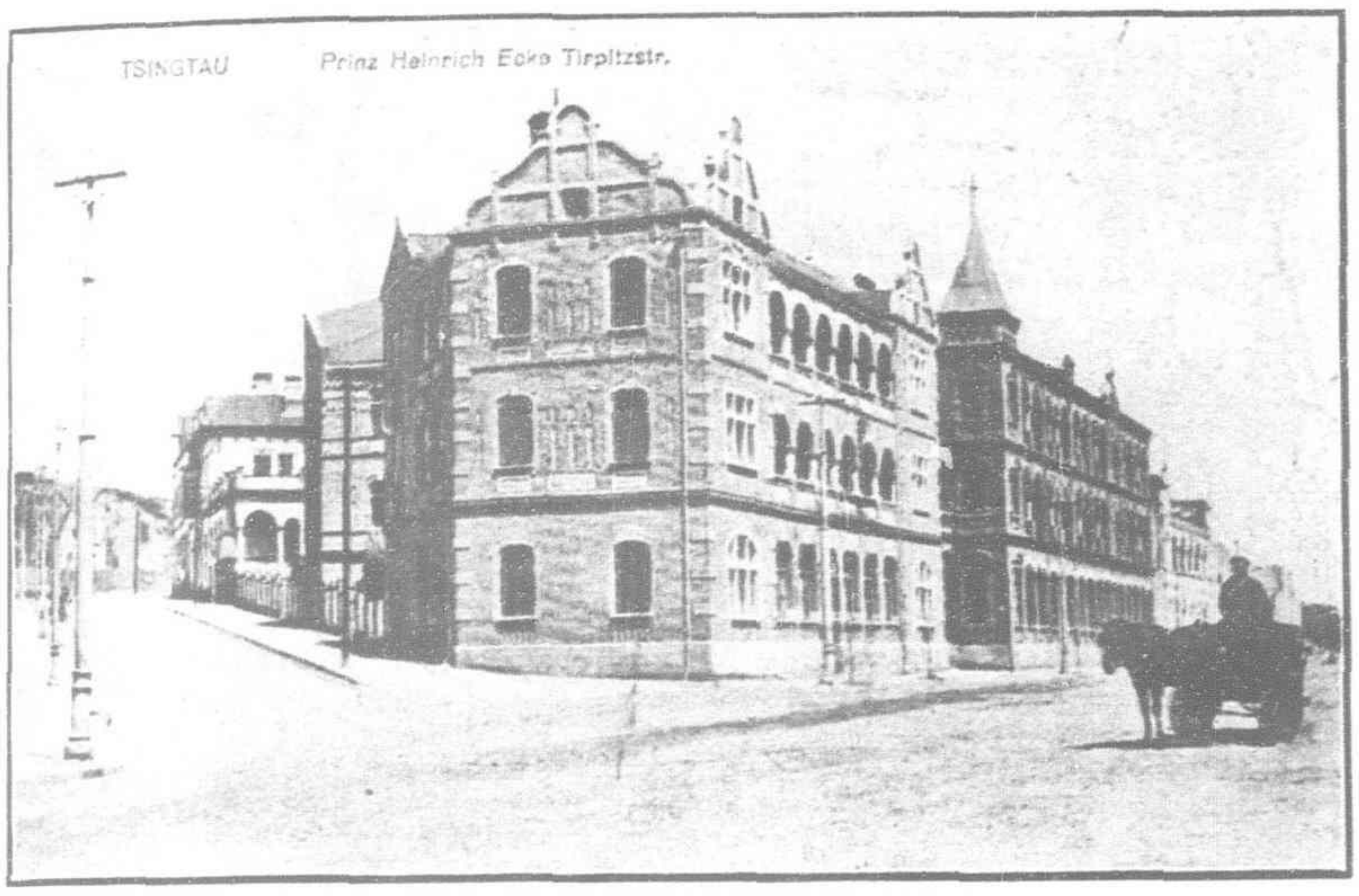
Bismarck Road.



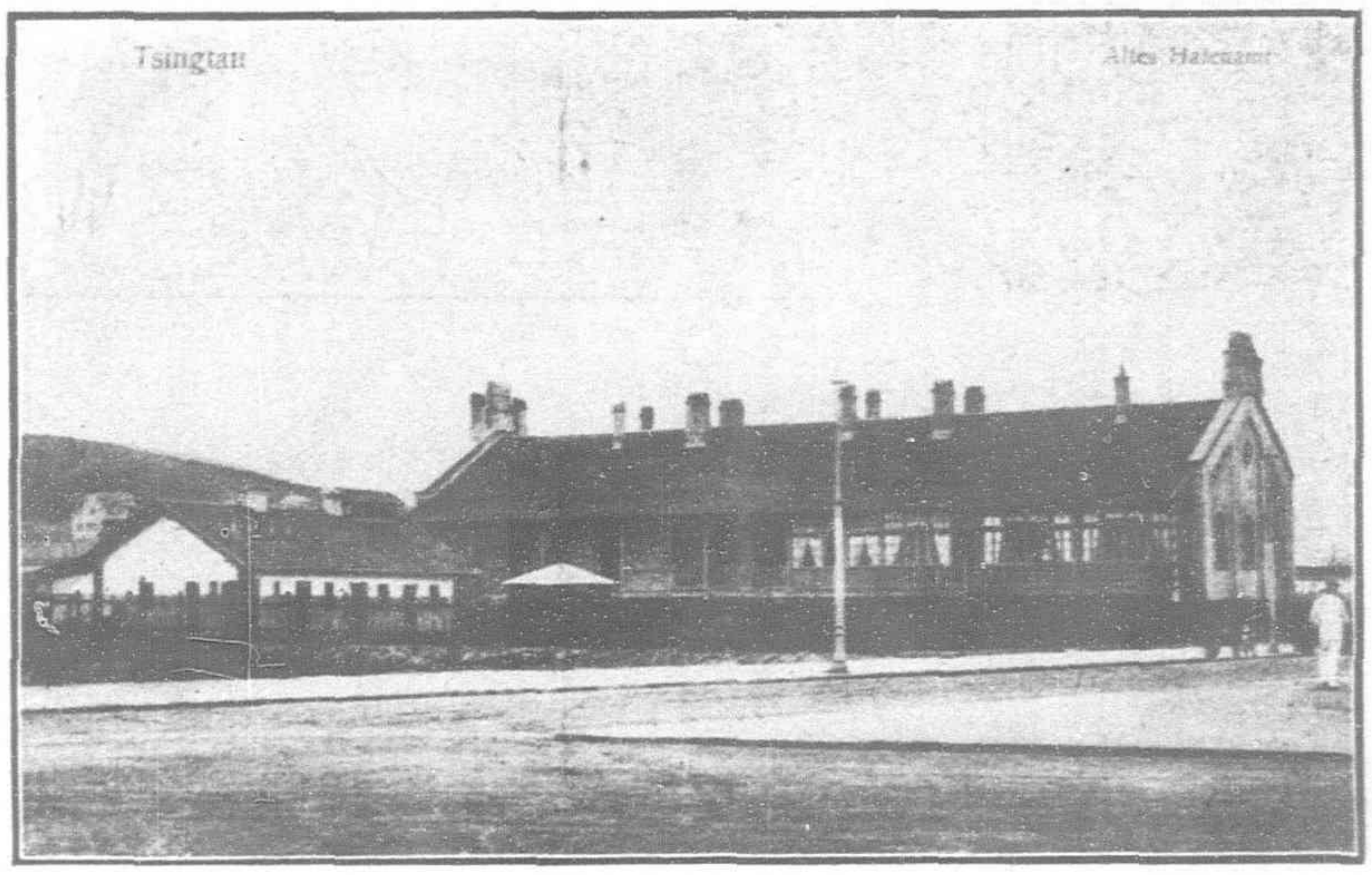
Catholic Mission.



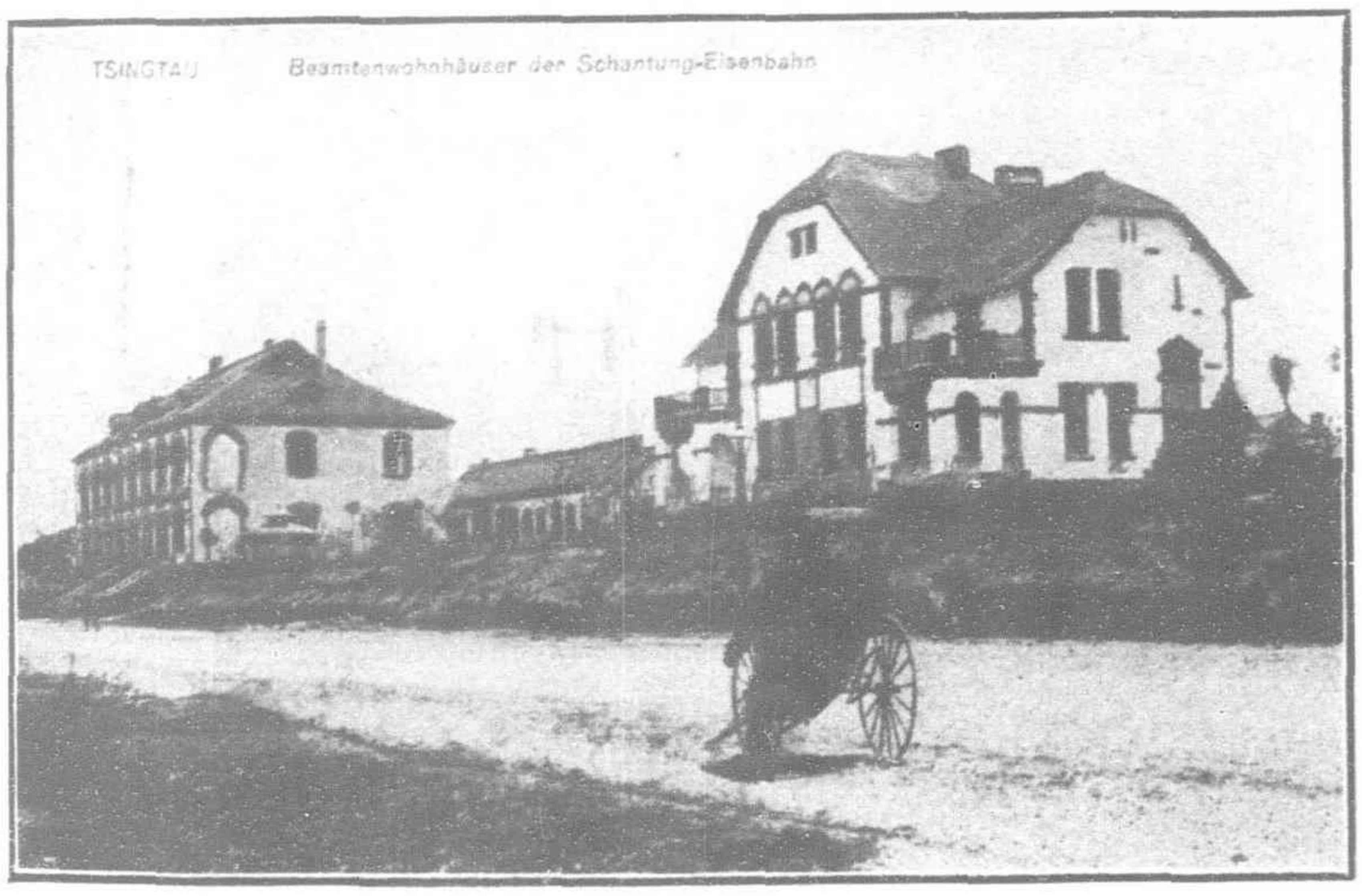
Office of the Shantung Mining Co.



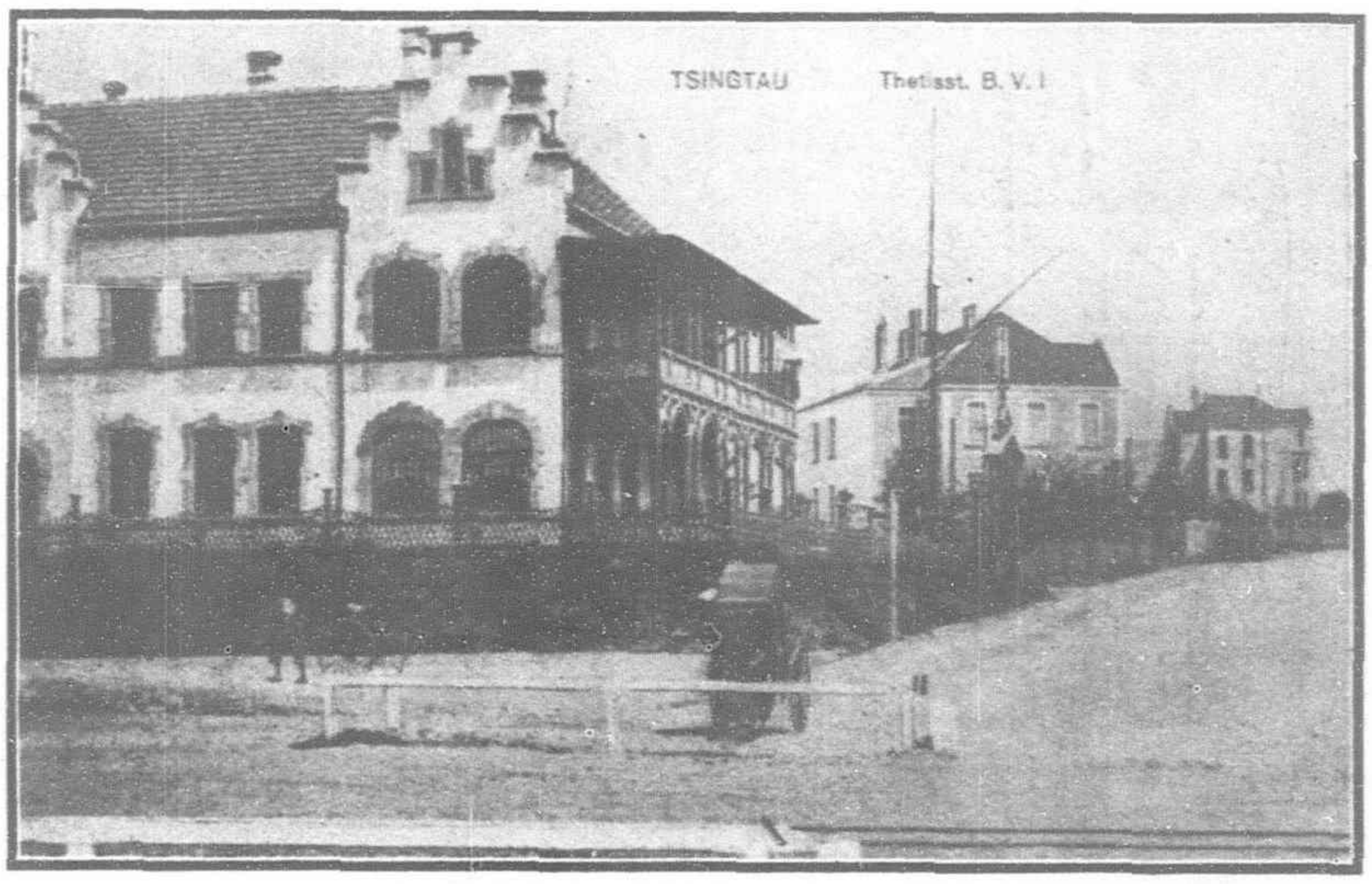
Prince Heinrich and Tirpitz Streets.



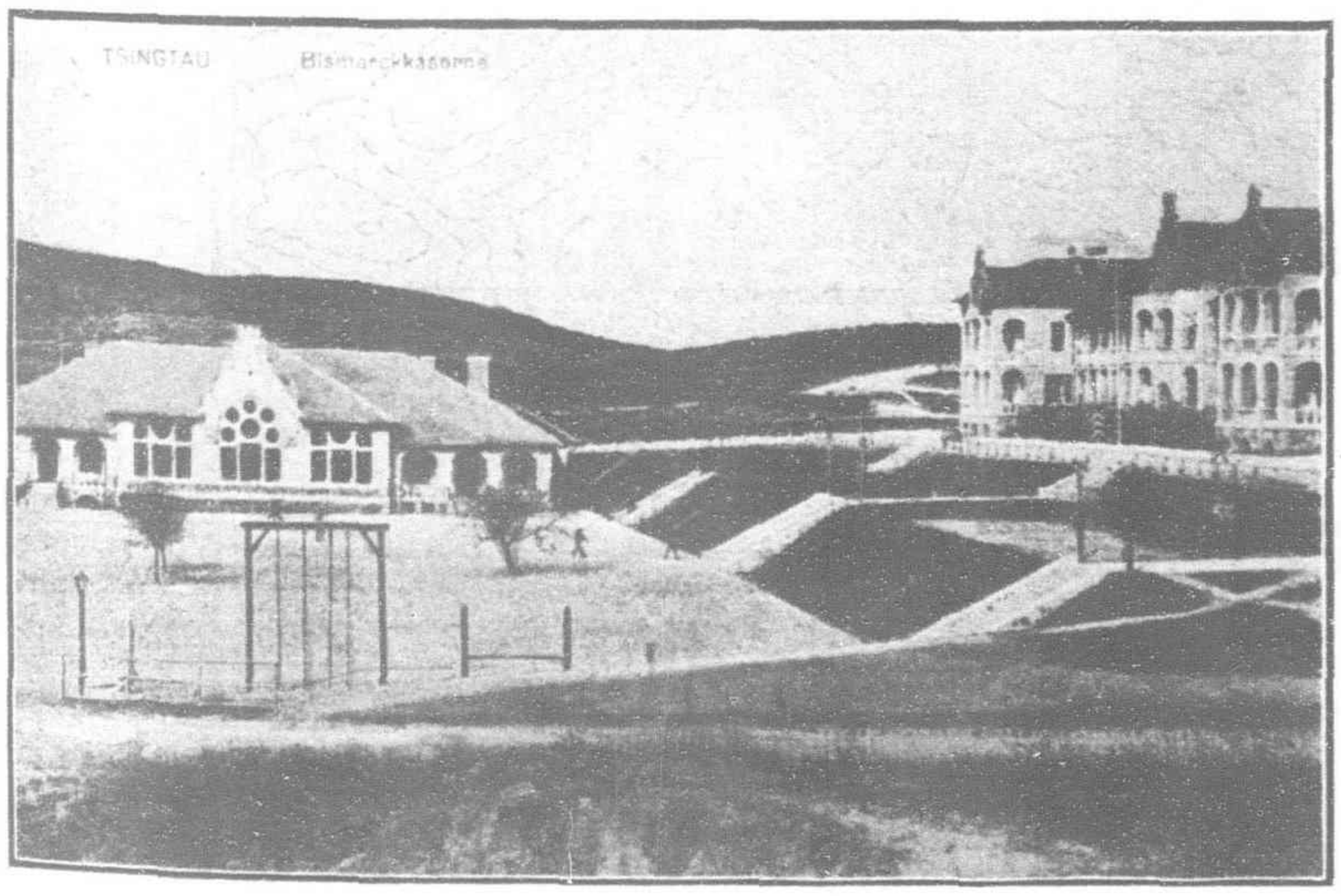
Old Harbor Office.



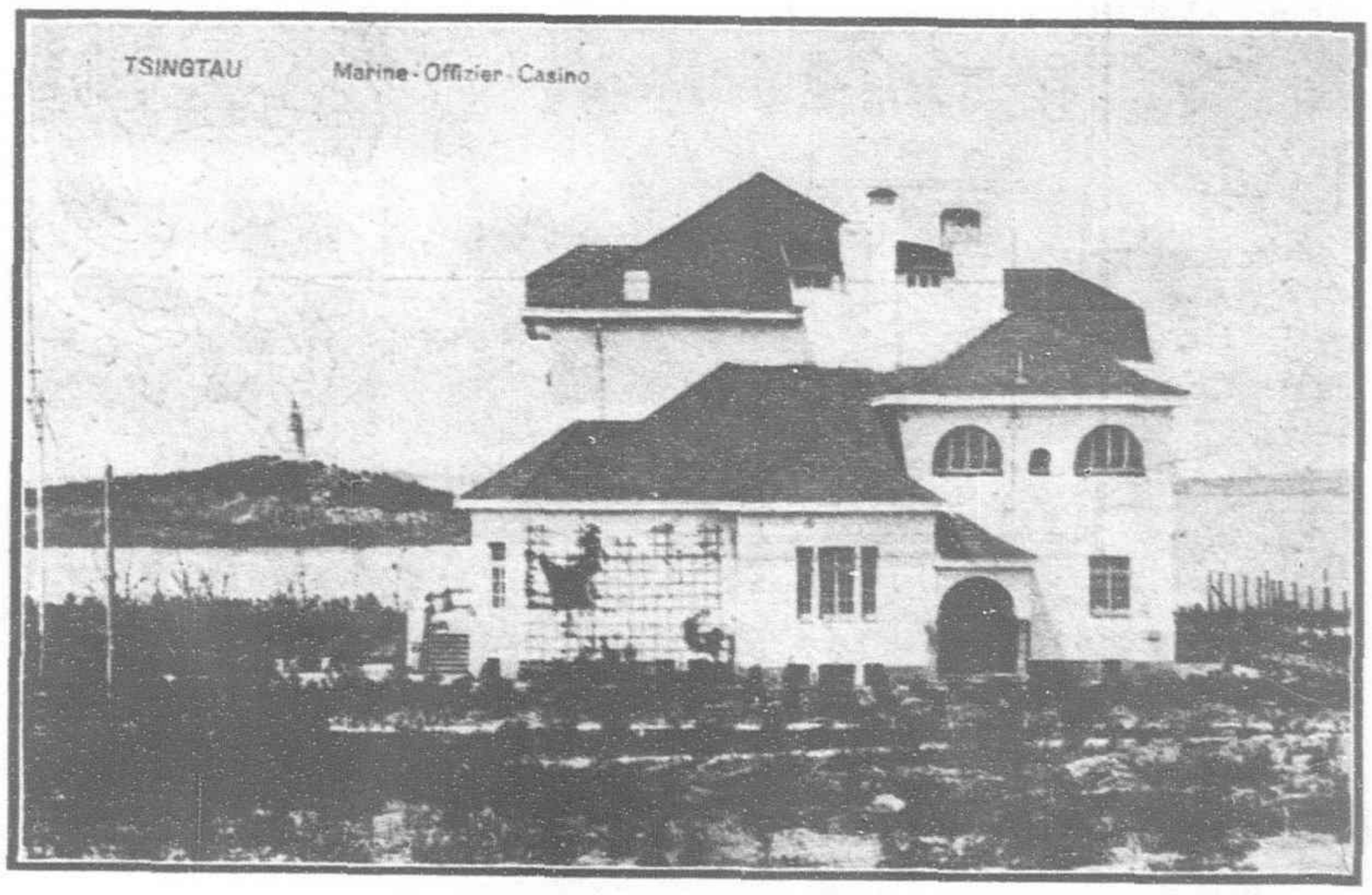
Railway Houses.



Thetis Street.

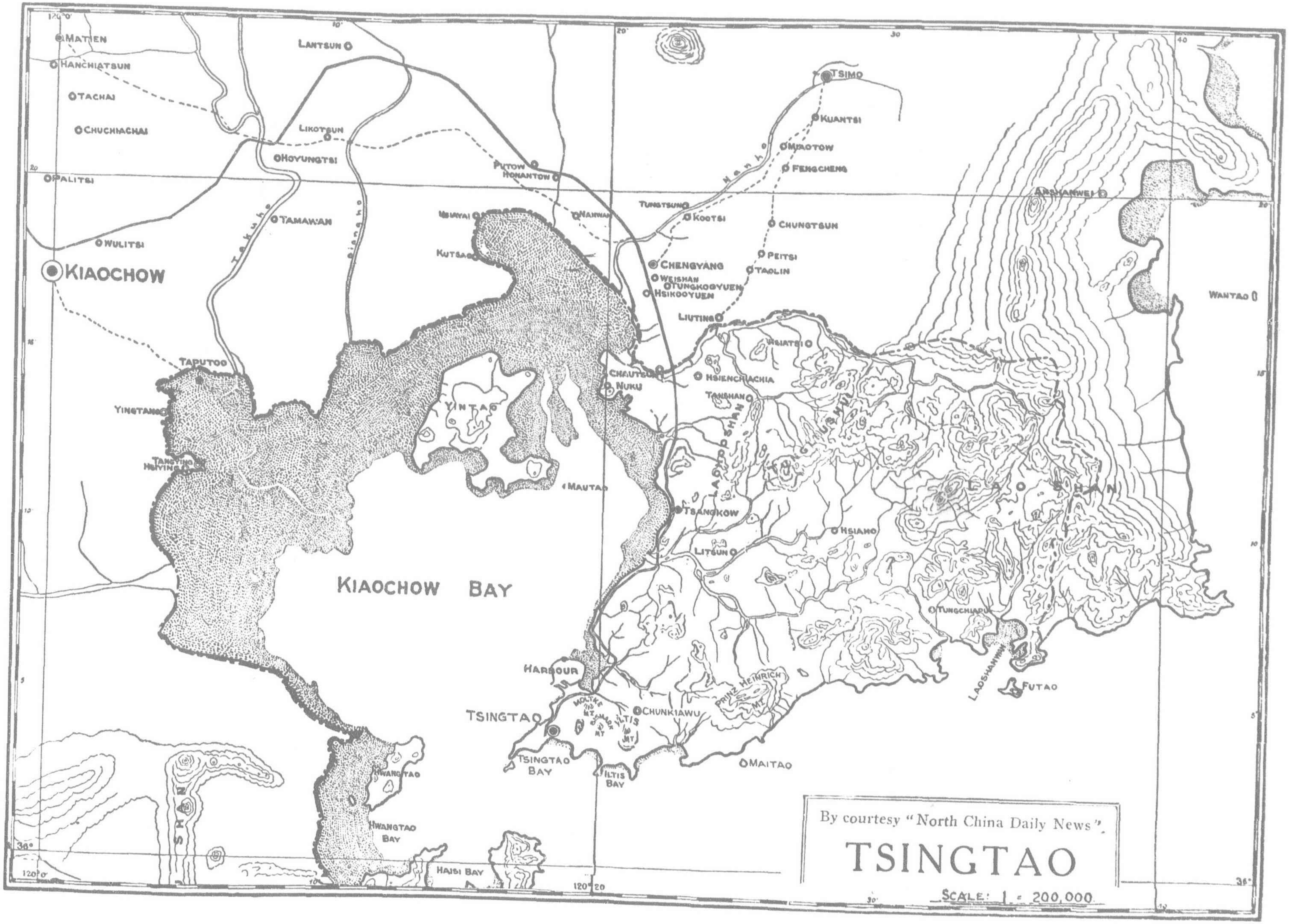


Bismarck Barracks.



Marine Officers Casino.

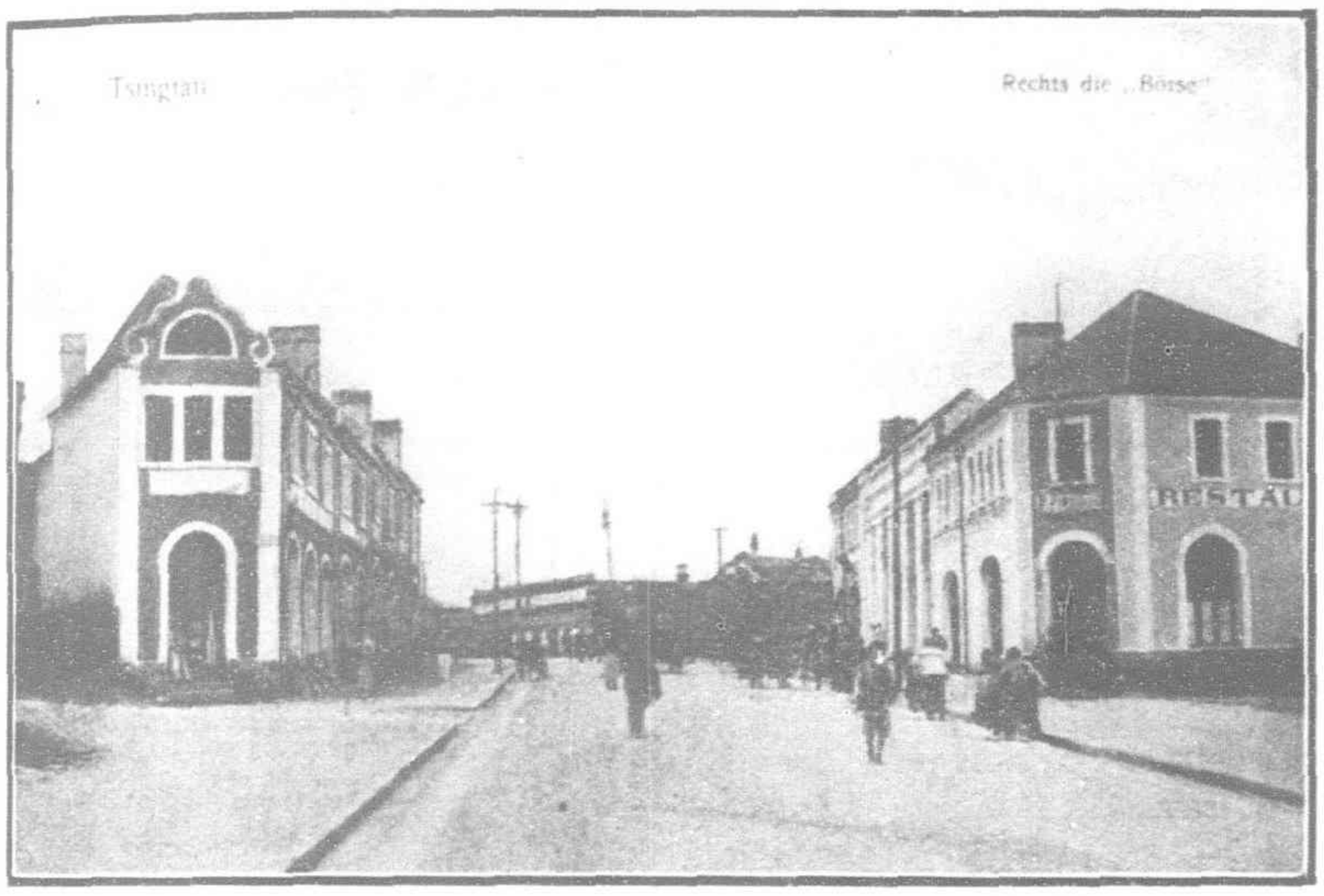
VIEWS OF TSINGTAU.

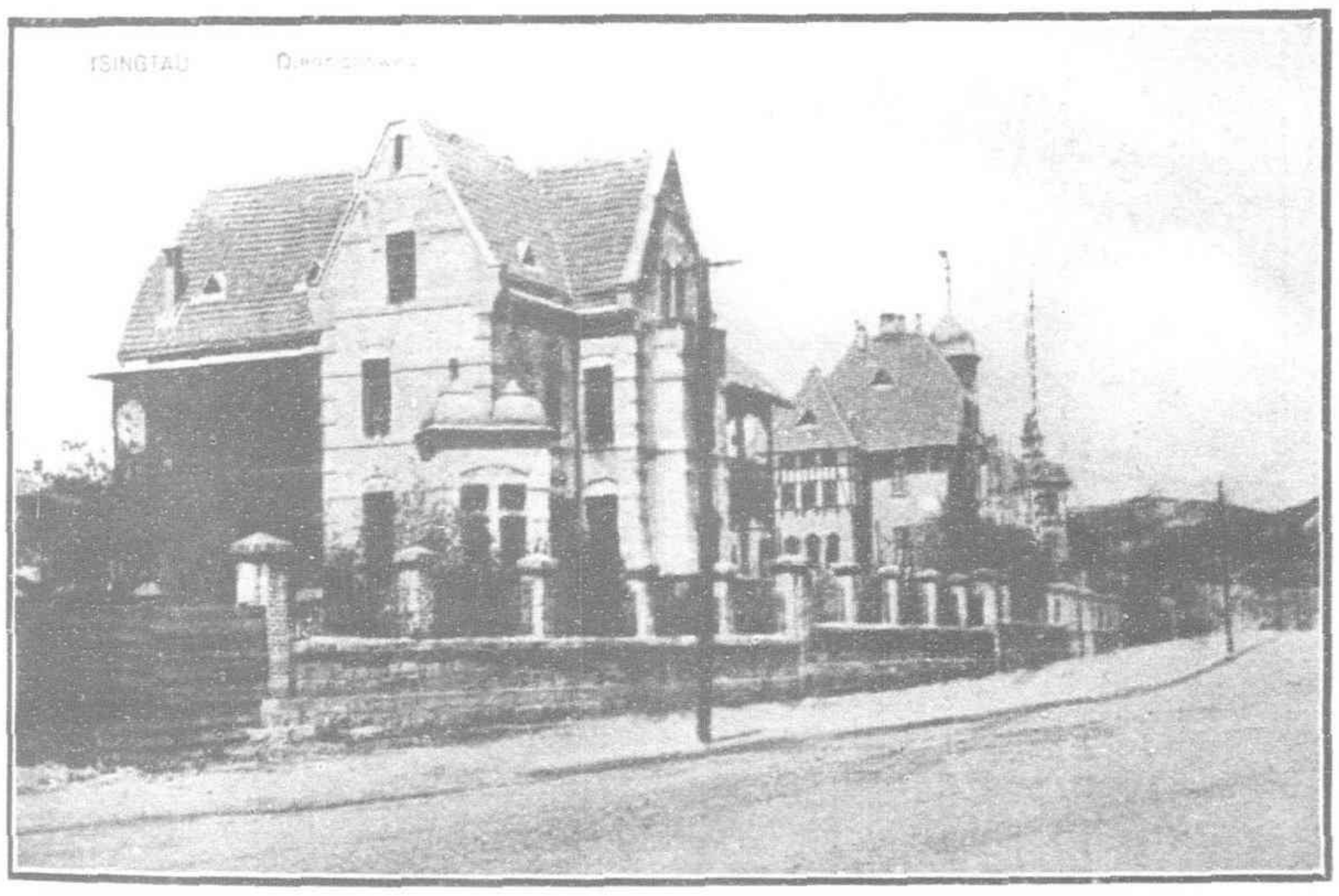


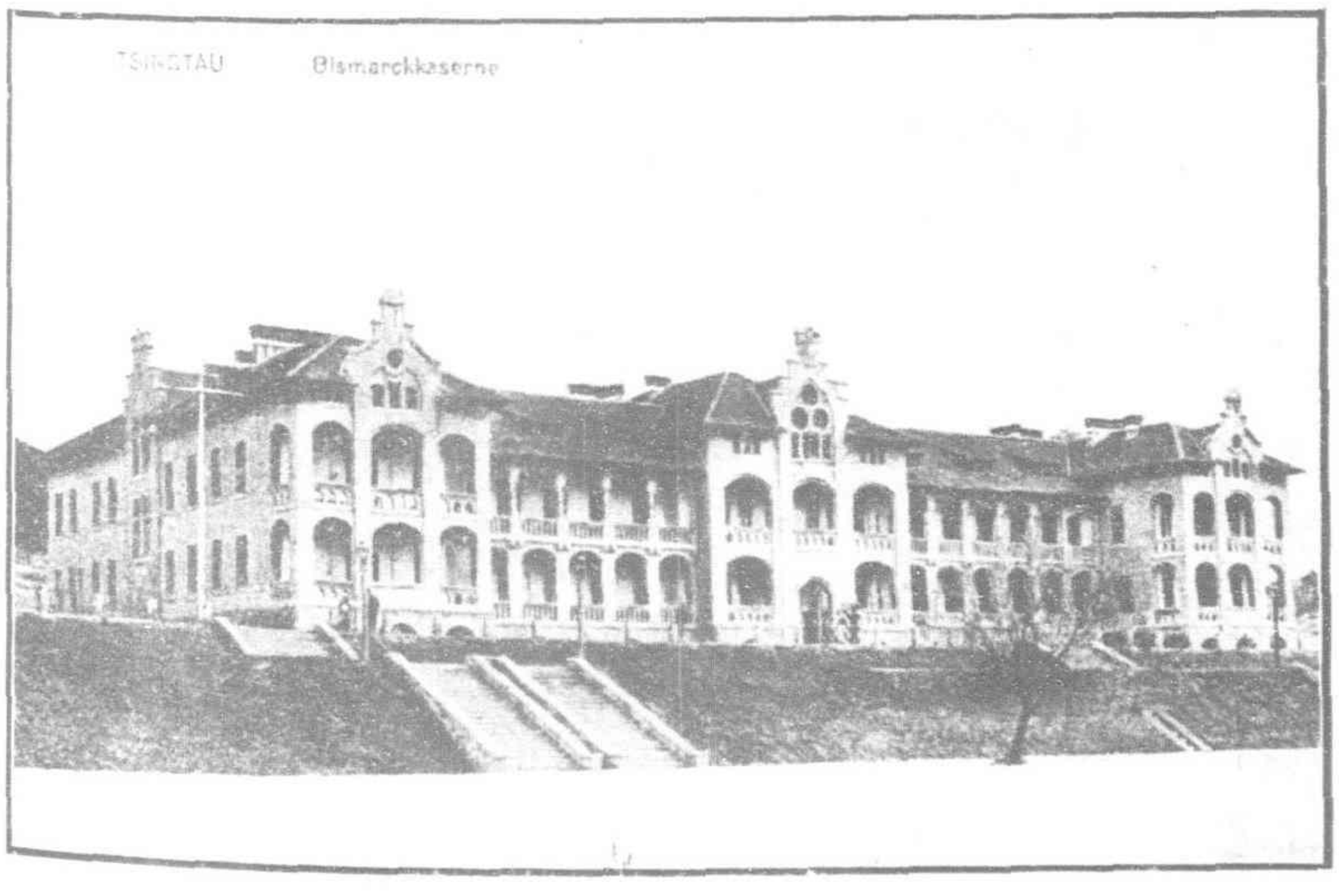
By courtesy "North China Daily News".

TSINGTAO

SCALE: 1 - 200,000







VIEWS OF TSINGTAU.

1.—Albertstrasse.
2.—The Bourse, on the right.
3.—Deidrichstrasse.
4.—Bismarck Barracks.

It was reported in the *Weekly China Tribune* of May 3, 1914, that valuable iron ore had been found in the Kiaochou district. The paper adds:

"Recent investigations have shown that samples of the ore found contain 65 per cent. iron, 0.24 per cent. manganese, 0.03 per cent. phosphorus, and 0.08 per cent. sulphur, while the veins of ore are 25 to 50 yards in thickness. It is estimated that there are about 100 million tons of ore in the district. Its value is still further increased by the fact that there is a plentiful supply of coal in the vicinity. New ironworks will be erected at Tsangkau, and will have two blast furnaces, each with an output of 150 tons a day. The capital to be invested will amount to about $2,500,000 gold."

WORK OF SLAUGHTERHOUSE—MISCELLANEOUS BUSINESS.

It is worthy of note that 27,168 cattle were slaughtered during 1913, as against 12,010 in 1912, a gain of 126 per cent. The increase was the result of a large demand for export, more than 20,000 cattle being shipped to foreign ports. This is accounted for by the more or less sustained high prices in foreign markets and the reduction of the Government tax at the close of 1912 from $1.50 to $1 per head. There was a slight increase in the number of pigs and sheep slaughtered and a falling off in the number of calves. The totals for 1913 were: Calves, 1,909; sheep, 3,044; and pigs, 13,222.

Five firms are interested in the export of beef in winter and live cattle in summer, all of which are destined for Vladivostok.

The reasons for the heavy export from Tsingtau as compared with Tientsin are the fact that communication with the producing centres, viz., Shantung and Honan, is very easy owing to the railway, and the perfectly equipped and managed Government slaughterhouse where two veterinary surgeons are constantly employed. In the slaughtering season (November to April inclusive) these are increased to five. The Russian Government also appreciates the German system of examination of every part of the animal. All beef imported into Vladivostok has to be accompanied by a certificate from a Russian veterinary surgeon, of whom there are several. 82,508 quarters and 28,413 head were shipped during the year.

Among the new enterprises projected this year in Tsingtau, the iron foundry, which it was proposed to start before the end of 1914, has already been mentioned. In January of this year the Chartered Bank opened a branch office, making now five recognized exchange brokers in all. The Yu Tai Bank, a Chinese concern, opened its doors about the same time. The competition has been very spirited. A large hat factory under German management was planned for the present year.

SHANTUNG RAILWAY.

The year 1913 marked an advance in the affairs of the Shantnug Railway Co. The goods carried over this line amounted to 911,434 tons in 1913, as against 827,222 in 1912, a gain of 10 per cent. As a specific declaration of the kind of goods is no longer required, except in the case of those articles dangerous to handle ,it is not possible to give reliable information as to the sort of goods shipped over the line. They were probably much the same as in 1912, when raw cotton, beans, bean oil, groundnuts, straw braid, skins, hemp, jute, tallow, and walnuts were shipped from the interior, and timber, cotton goods, cloth, petroleum, sugar, and cigarettes were transported westward from the coast. A heavy reduction in freight rates has been made on import cargo to points west, but a slight reduction only to crops shipped east to Tsingtau. There was also a slight increase in the number of passengers carried over the Shantung Railway during last year. In 1913 there were 1,317,437 passengers, as against 1,230,403 in 1912, a gain of 7 per cent. As the gain in 1912 over the preceding year was more than 35 per cent, this small increase has been something of a disappointment. It is accounted for by the competition of the Tientsin-Pukow line. Many travelers going to Shanghai now go straight by rail to Nanking instead of traveling by way of Tsingtau.

The table below will show the steady increase during the past five years:—

	Tons.
1909	712,060
1910	760,123
1911	705,073

1912—	
Westward traffic	358,492
Eastward traffic	468,730
Total	827,222
1913—*	
Westward traffic	374,484
Eastward traffic	536,950
Total	911,434

SHIPPING STATISTICS.

The prospects at the beginning of the present year were that it would be one of keen competition for both European and interport shipping. Butterfield & Swire, the agents for the Blue Funnel Line, opened an office at Tsingtau and are reported as doing a good business. The China Home Freight Conference, which was appealed to in 1911 because the number of vessels going to Tsingtau did not meet the demand of shippers, kept up and even increased the rates in certain instances during 1913. They could not maintain them, however, and the end of the year was marked by a severe competition.

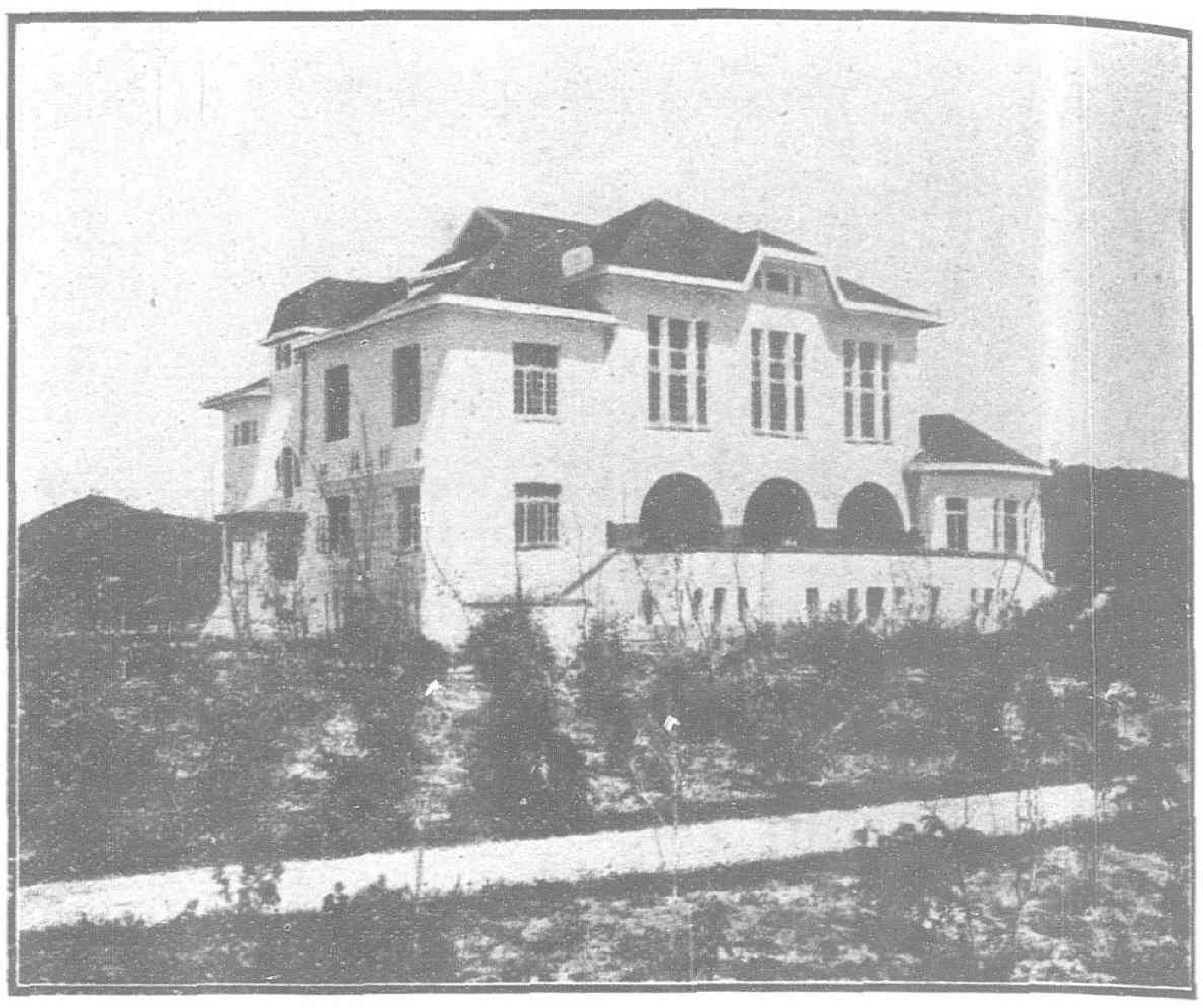
The following table shows the number, nationality, and tonnage of steam vessels entering the port of Tsingtau during the calendar years 1912 and 1913:

Nationalities.	1912		1913	
	Number.	Tons.	Number.	Tons.
American	2	4,146	17	35,238
Austro-Hungarian	....	....	1	3,440
British	271	454,107	253	407,156
Chinese	25	26,265	48	28,587
Dutch	1	2,293	....	....
French	5	19,231	4	13,067
German	255	502,721	331	572,062
Japanese	169	142,543	260	222,693
Norwegian	41	40,089	8	12,939
Russian	10	9,993	1	3,440
Total	779	1,201,388	923	1,298,622

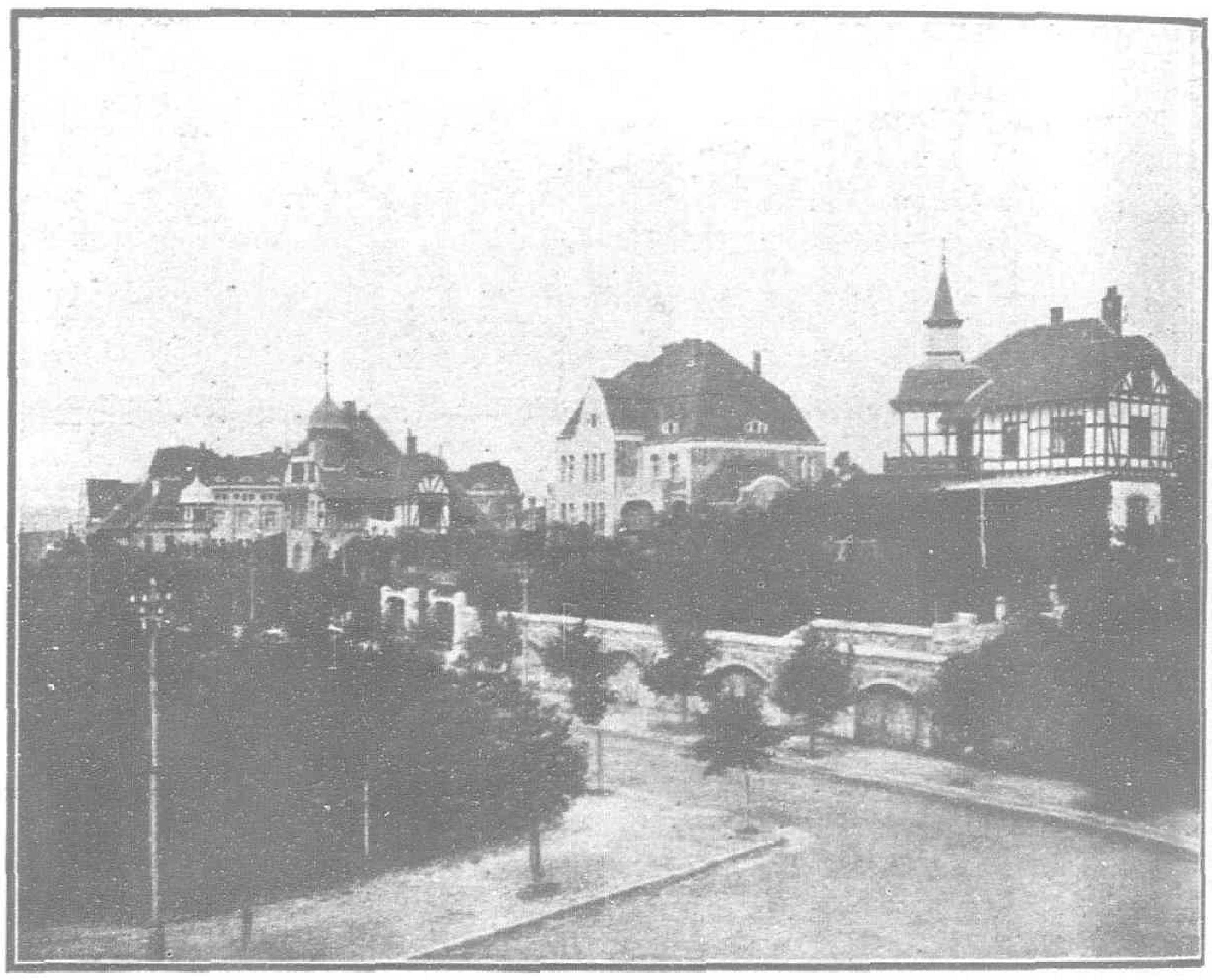
The gain in the number of American ships in 1913 is accounted for by the fact that American firms are engaged in the exportation of cattle to Vladivostok. About 60,000 tons of ocean freight were shipped—35,000 by weight and 25,000 by measurement.

FOREIGN TRADE.

The net trade of Tsingtau in 1912 (foreign and Chinese imports less re-exports, and Chinese exports of local origin) amounted to $39,392,705 gold, and in 1913 it increased to $43,193,382, a gain of $3,800,677, or 10 per cent. The net foreign imports were $19,131,778 for 1913 and $17,247,802 for 1912, and the net native imports $5,306,072 for 1913 and $4,145,364 for 1912. The net exports were $18,755,432 for 1913 and $17,999,539 for 1912.



TSINGTAU: Marine Officers' Casino.



TSINGTAU: Diederichs Road.

The direct trade with foreign countries, including gross imports, exports, and re-exports of Chinese goods, by principal countries, in the last two years, was as follows.[a]

Countries.	1912 Foreign imports.	1912 Native exports.	1912 Total.	1913 Foreign imports.	1913 Native exports.	1913 Total.
Belgium	$323,672	$306,186	$629,858	$224,748	$349,297	$574,045
France	7,624	3,473,286	3,480,910	13,867	2,513,456	2,527,323
Germany	2,047,497	1,253,600	3,301,097	2,107,752	1,669,150	3,776,902
Great Britain.	268,915	331,553	600,468	349,696	236,722	586,418
Hongkong	1,436,234	80,886	1,517,120	1,334,083	284,074	1,618,157
Italy	5,040	153,360	158,400	2,232	226,622	228,854
Japan	4,862,069	656,774	5,518,843	6,063,121	1,544,534	7,607,655
Netherlands	15,840	284,400	300,240	35,388	505,866	541,254
Russia	226,222	682,154	908,376	76,761	1,754,226	1,830,987
Singapore	383,040	....	383,040	453,989	1,870	455,859
United States.	959,040	34,375	993,415	361,737	[b] 999,543	1,361,280
All other	53,847	279,914	333,761	64,601	93,976	158,577
Total	10,589,040	7,536,488	18,125,528	11,087,975	10,179,336	21,267,311

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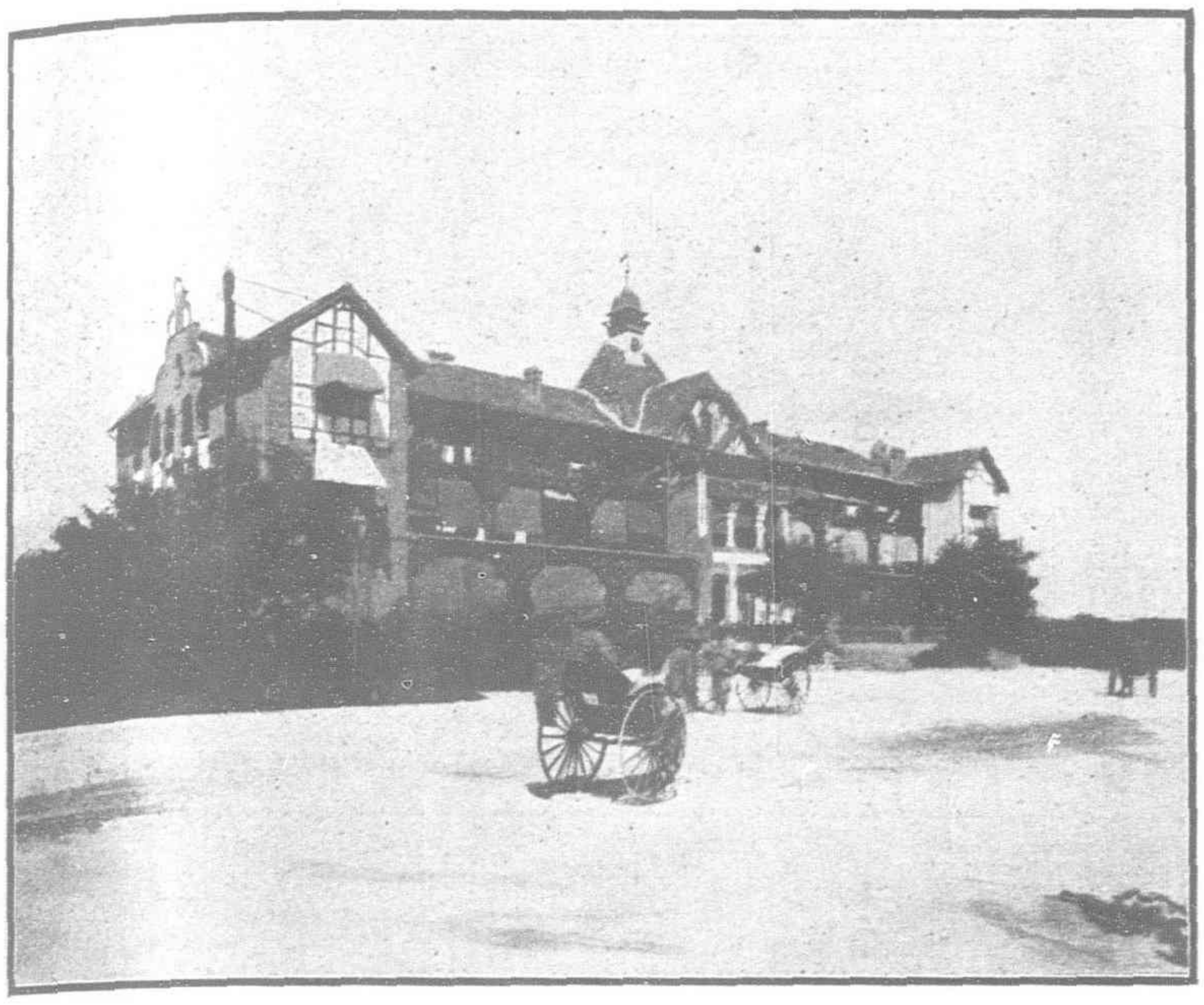
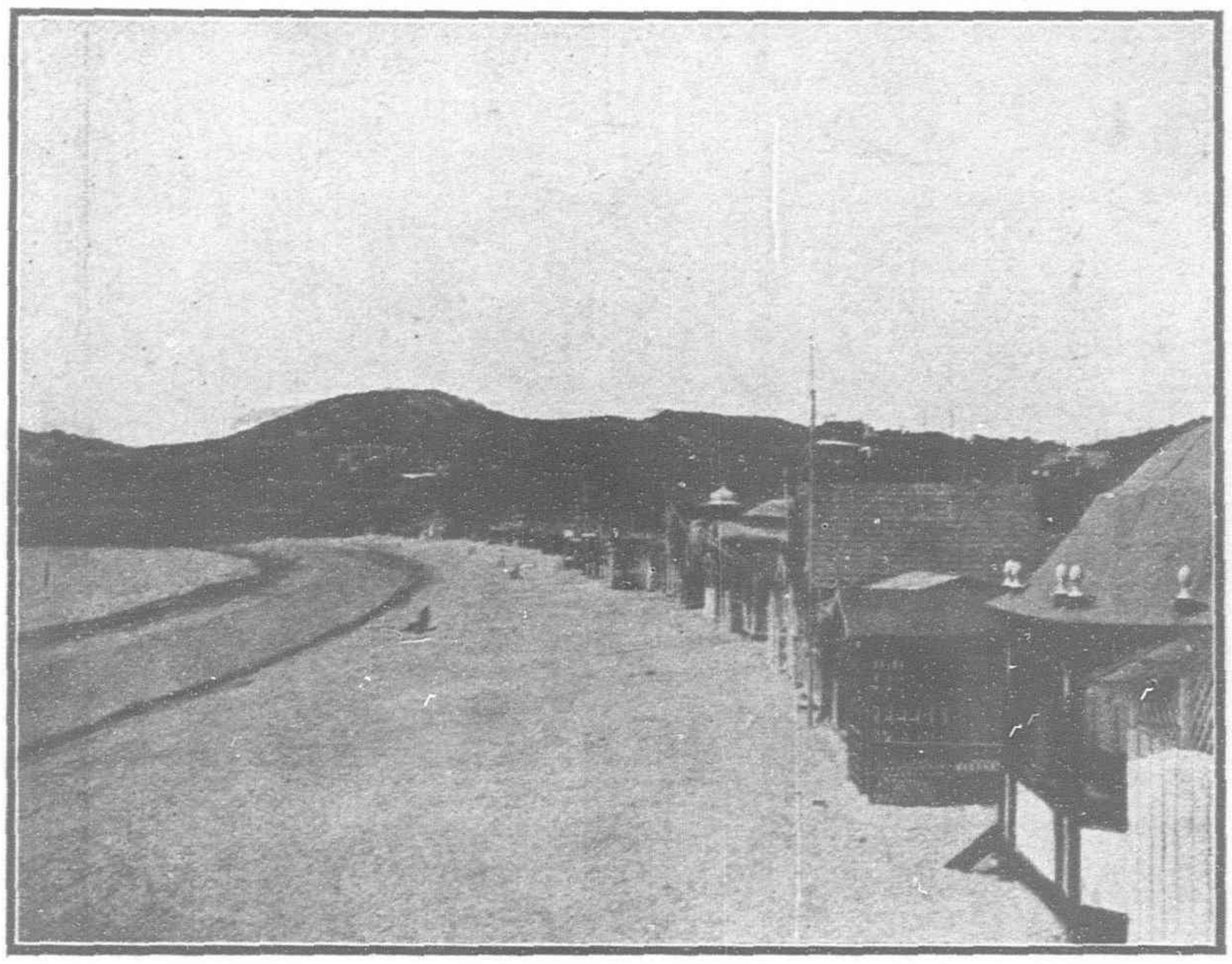
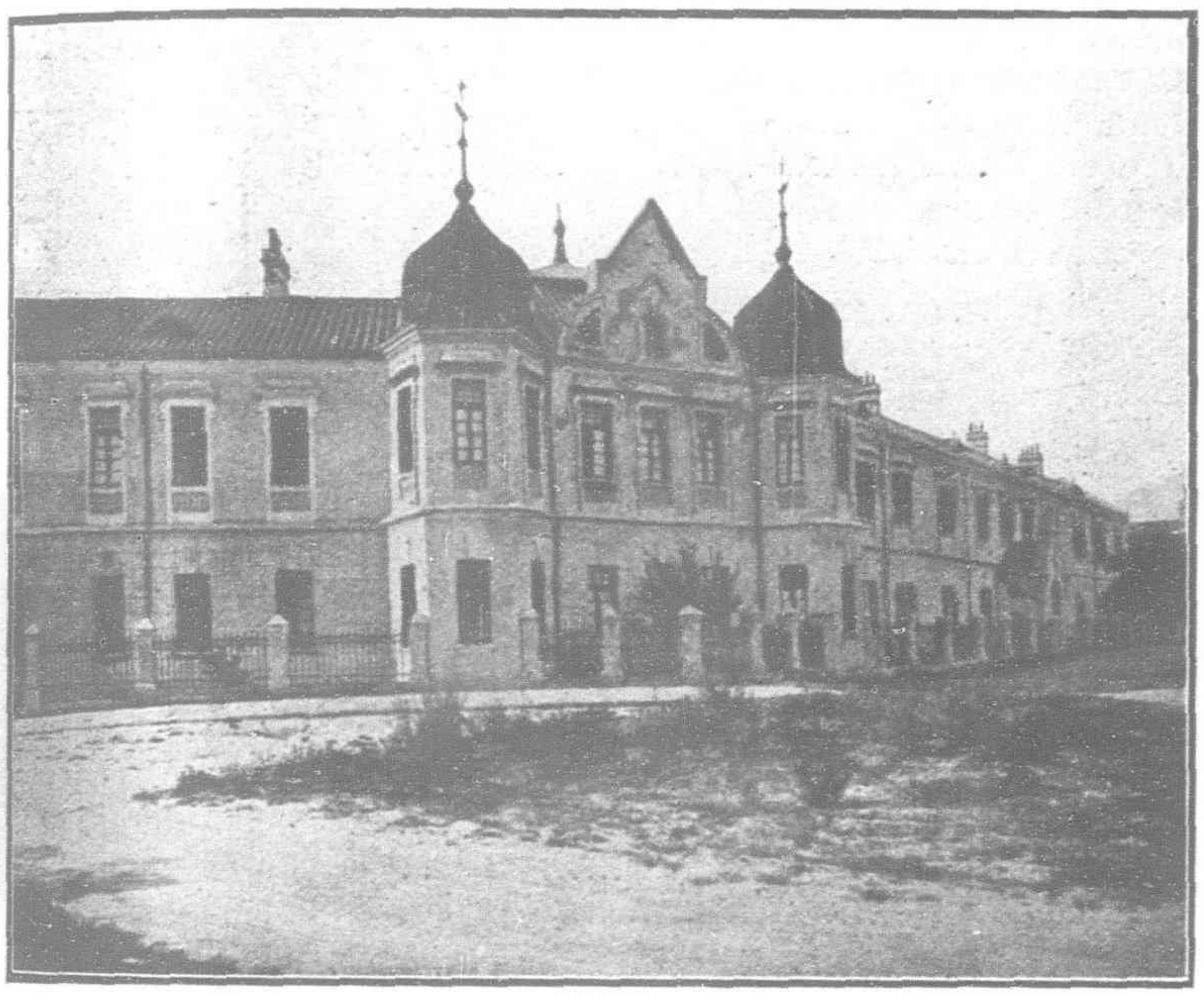
* Out of the 374,484 tons going west, 177,914 tons came from Tsingtau; and out of the 536,950 tons going east, 347,758 tons arrived from Tsingtau.

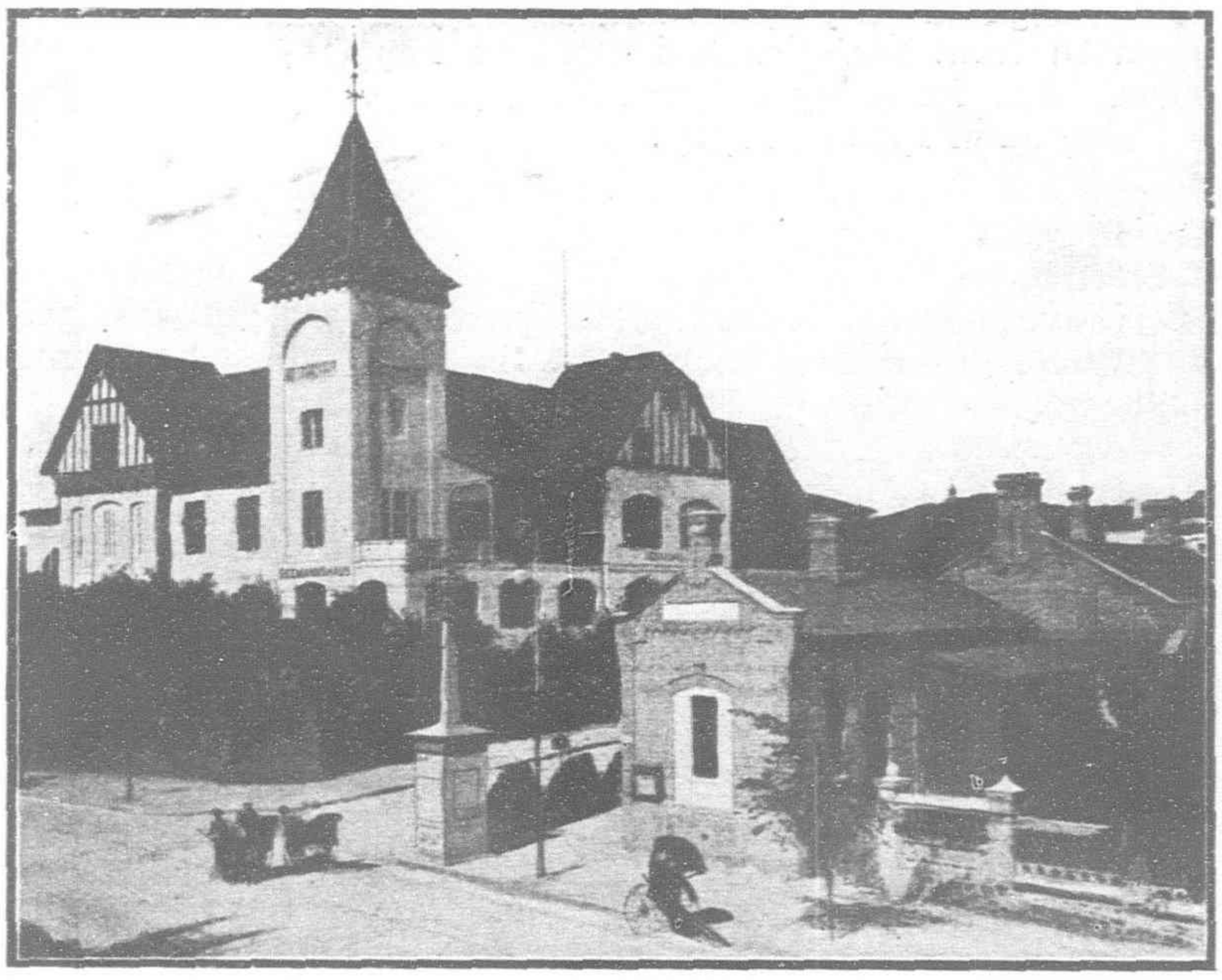
[a] In this and succeeding tables the conversions from haikwan taels to gold dollars have been made on the basis of a valuation of 72 cents for 1912 and 73 cents for 1913.

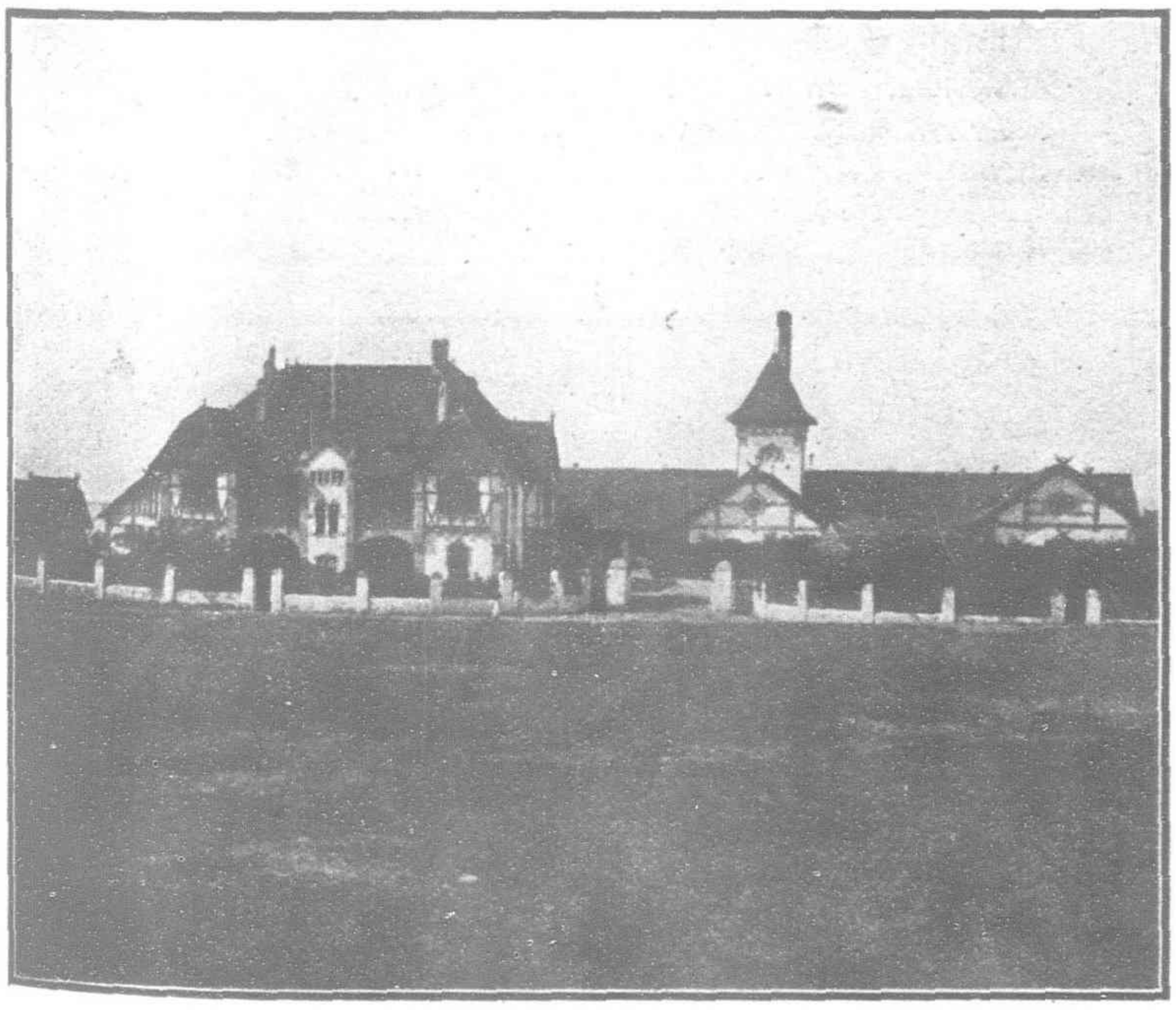
[b] Exports as declared at United States consulate; other figures are not available.

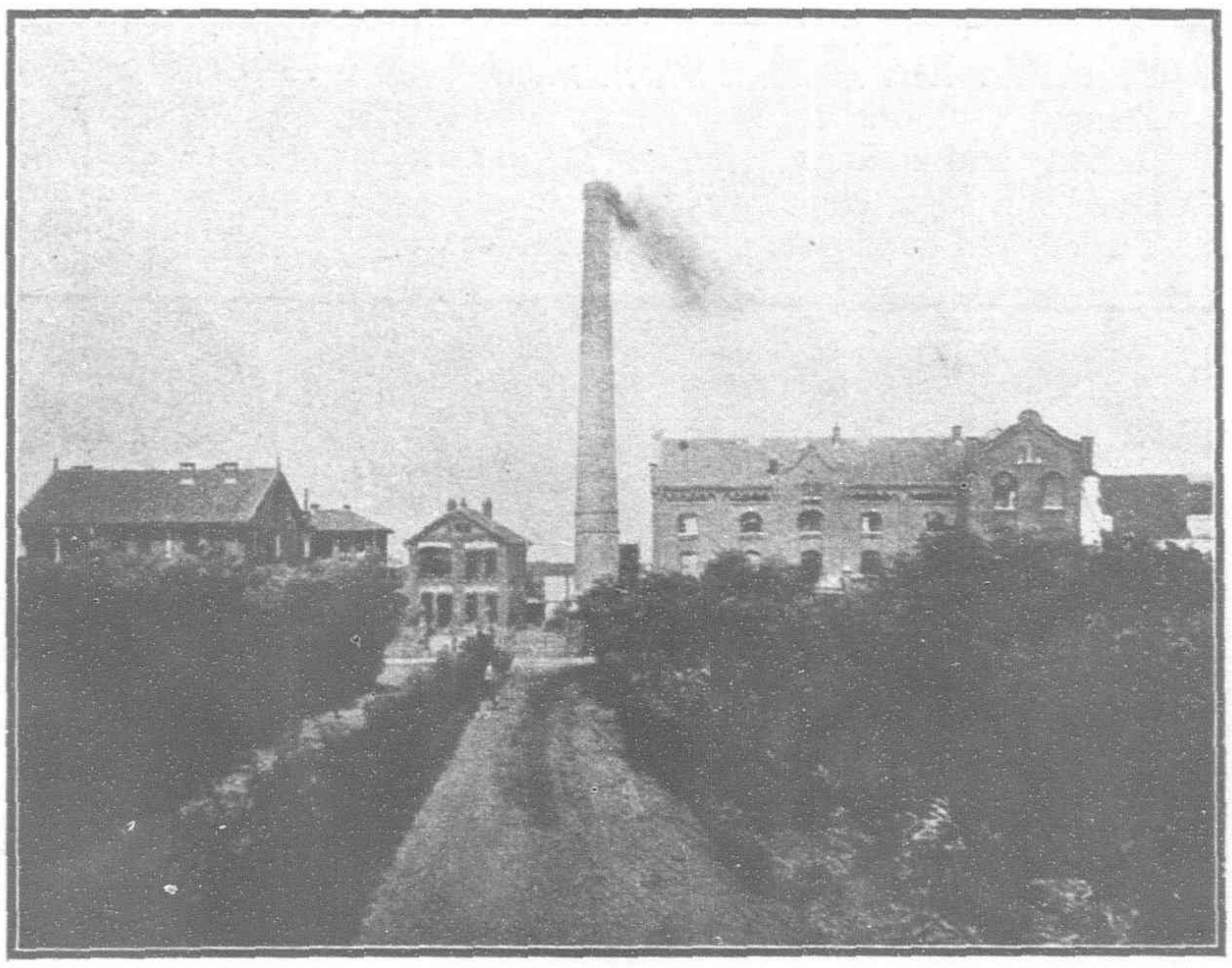








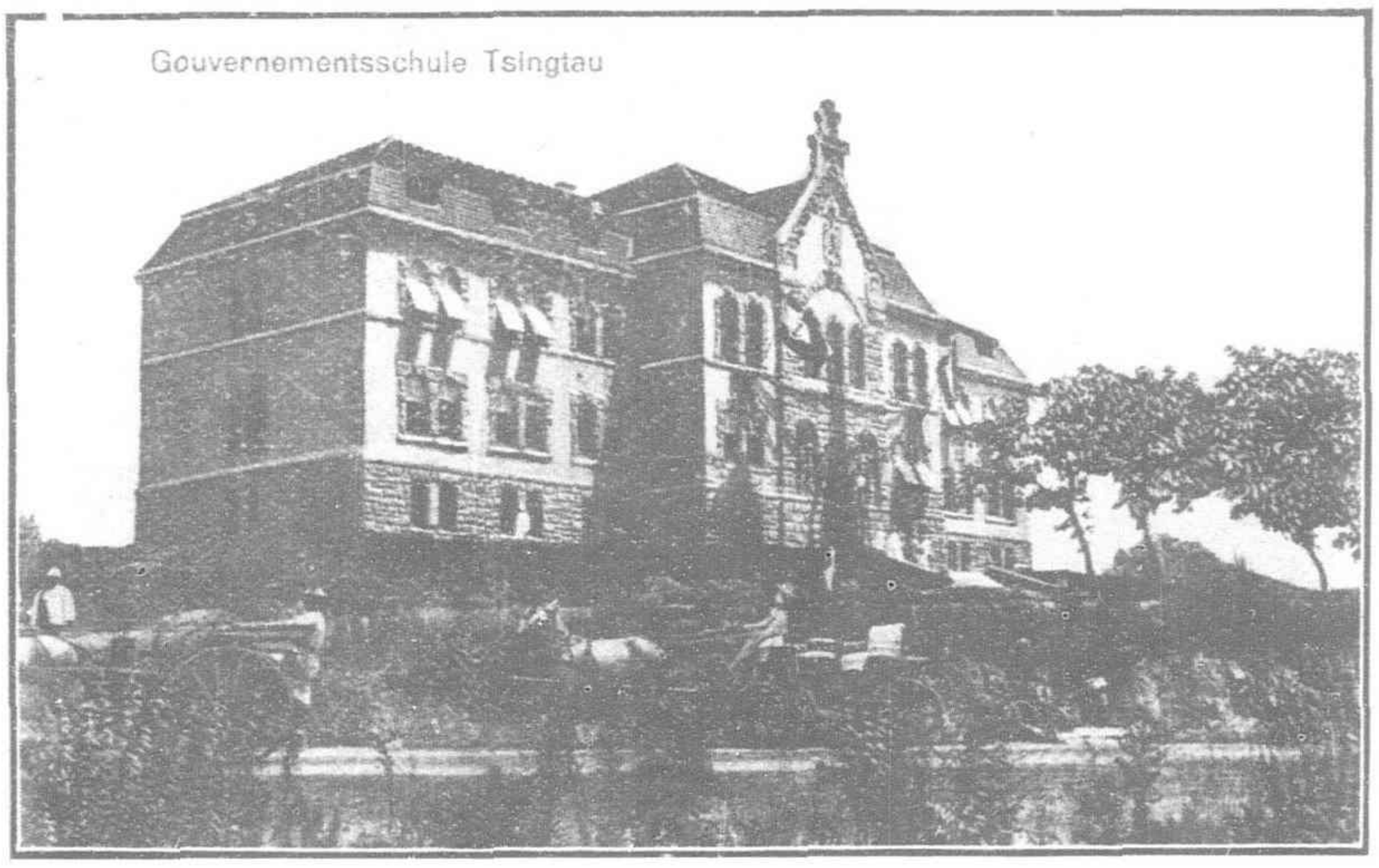




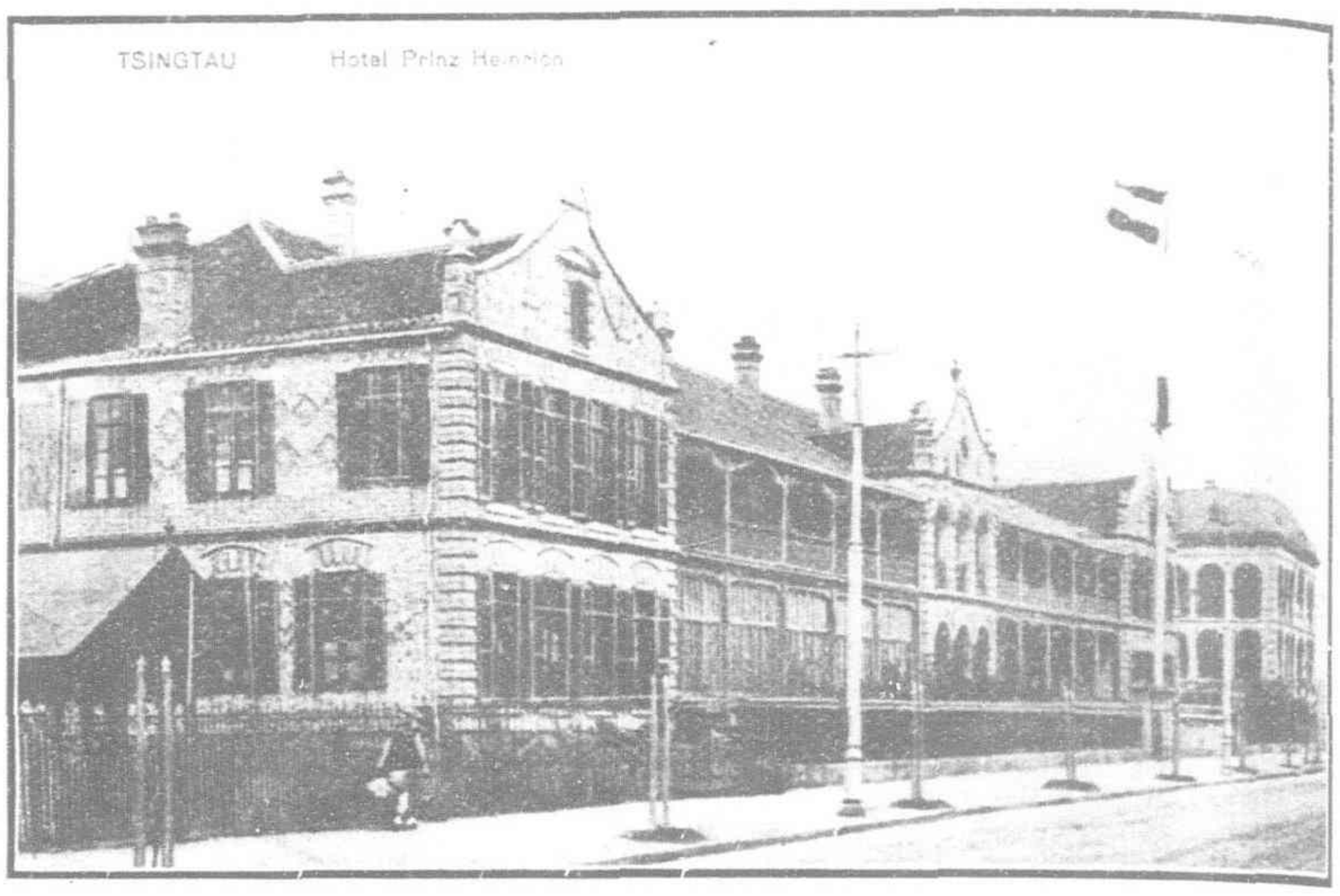
VIEWS OF TSINGTAU.

1.—The Strand Hotel.
2.—Holy Ghost Convent.
3.—Slaughter-house.

1.—The Beach.
2.—Sailors' Home.
3.—Germania Brewery.



TSINGTAU: Government School.

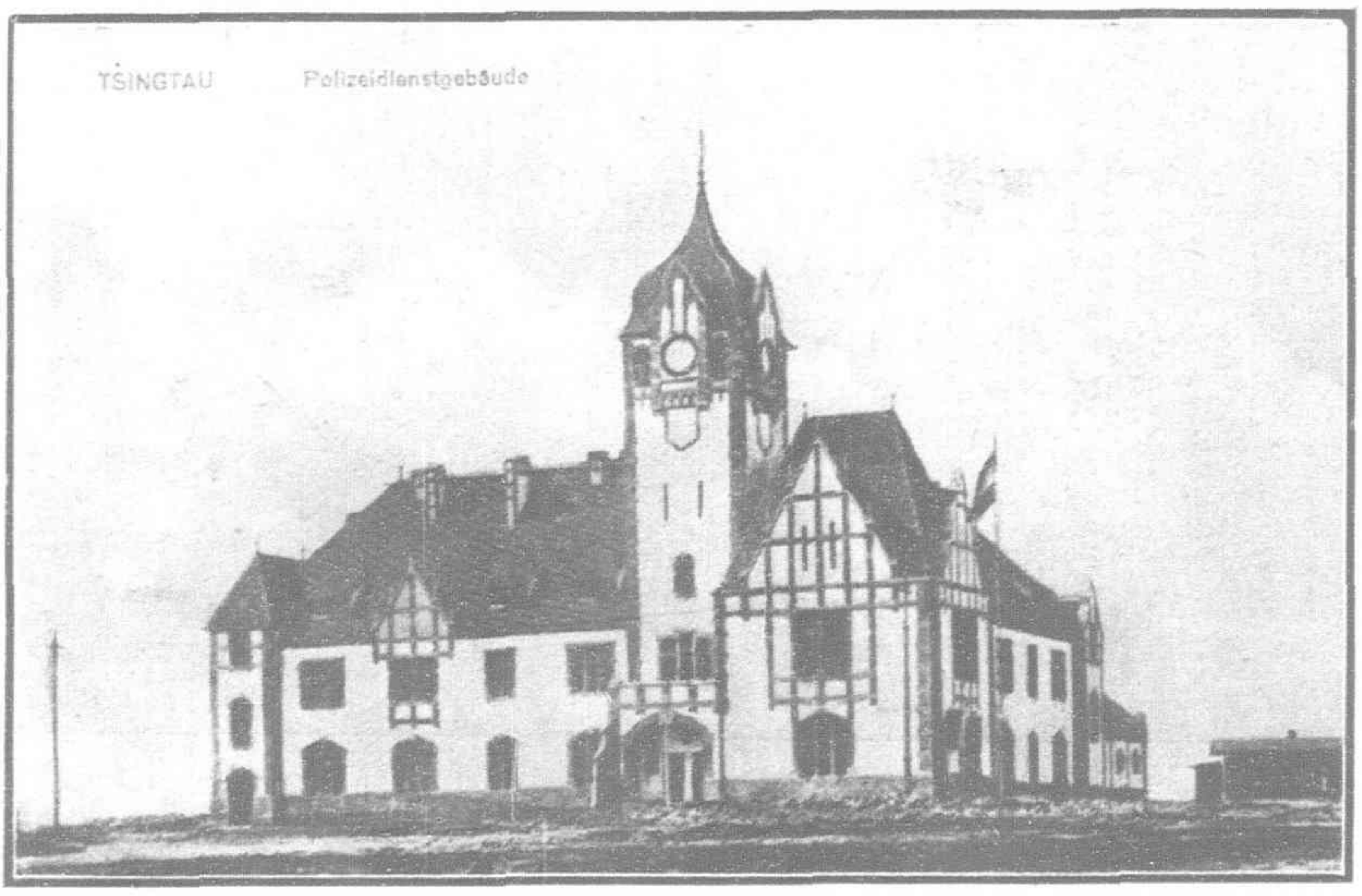


Hotel Prince Heinrich.

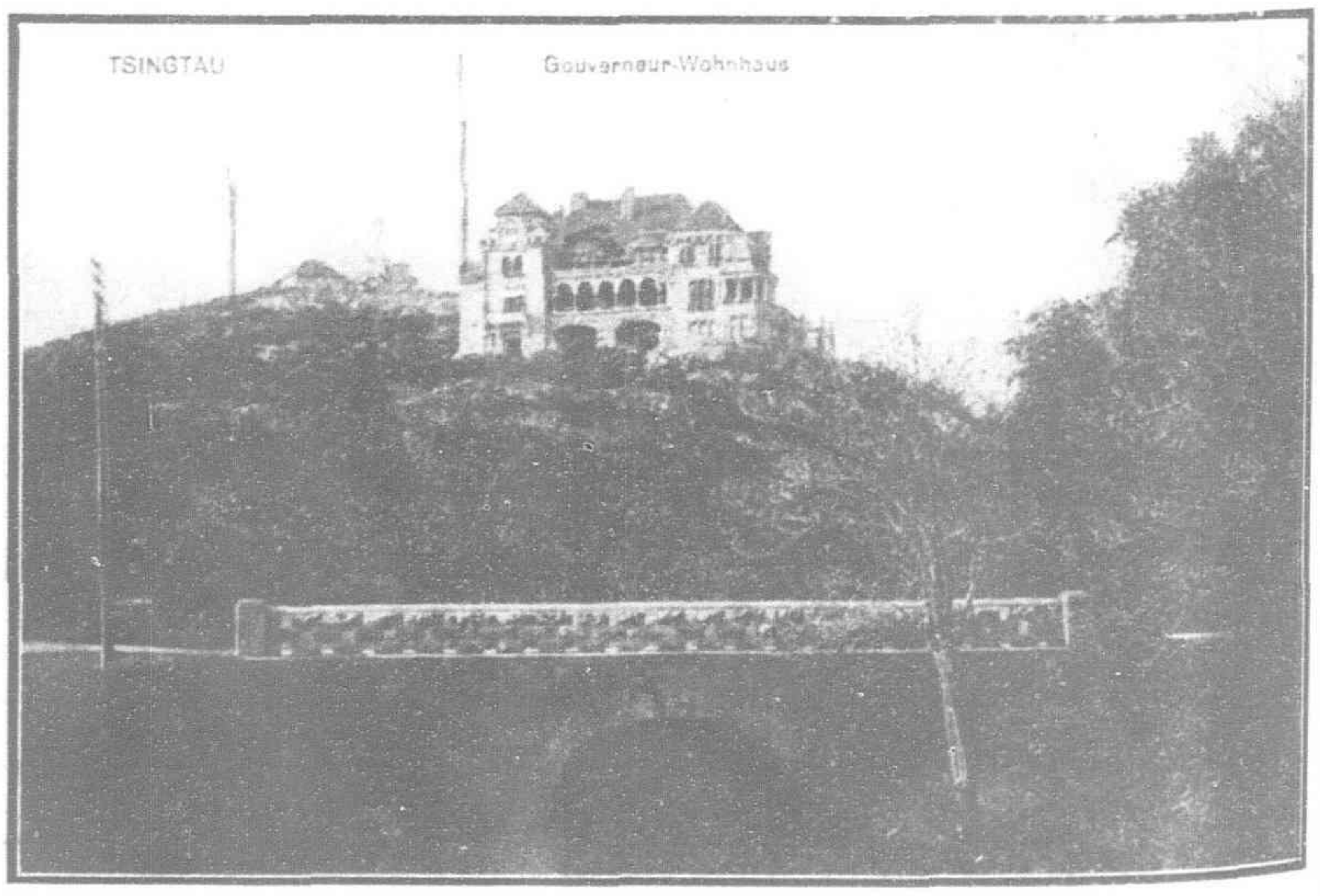
PRINCIPAL ARTICLES IMPORTED.

The figures for imports from the United States are probably not as high as they should be, as many American goods are imported from Shanghai and listed as imports from Chinese ports. The following statement shows the principal net imports at Tsingtau in 1912 and 1913:

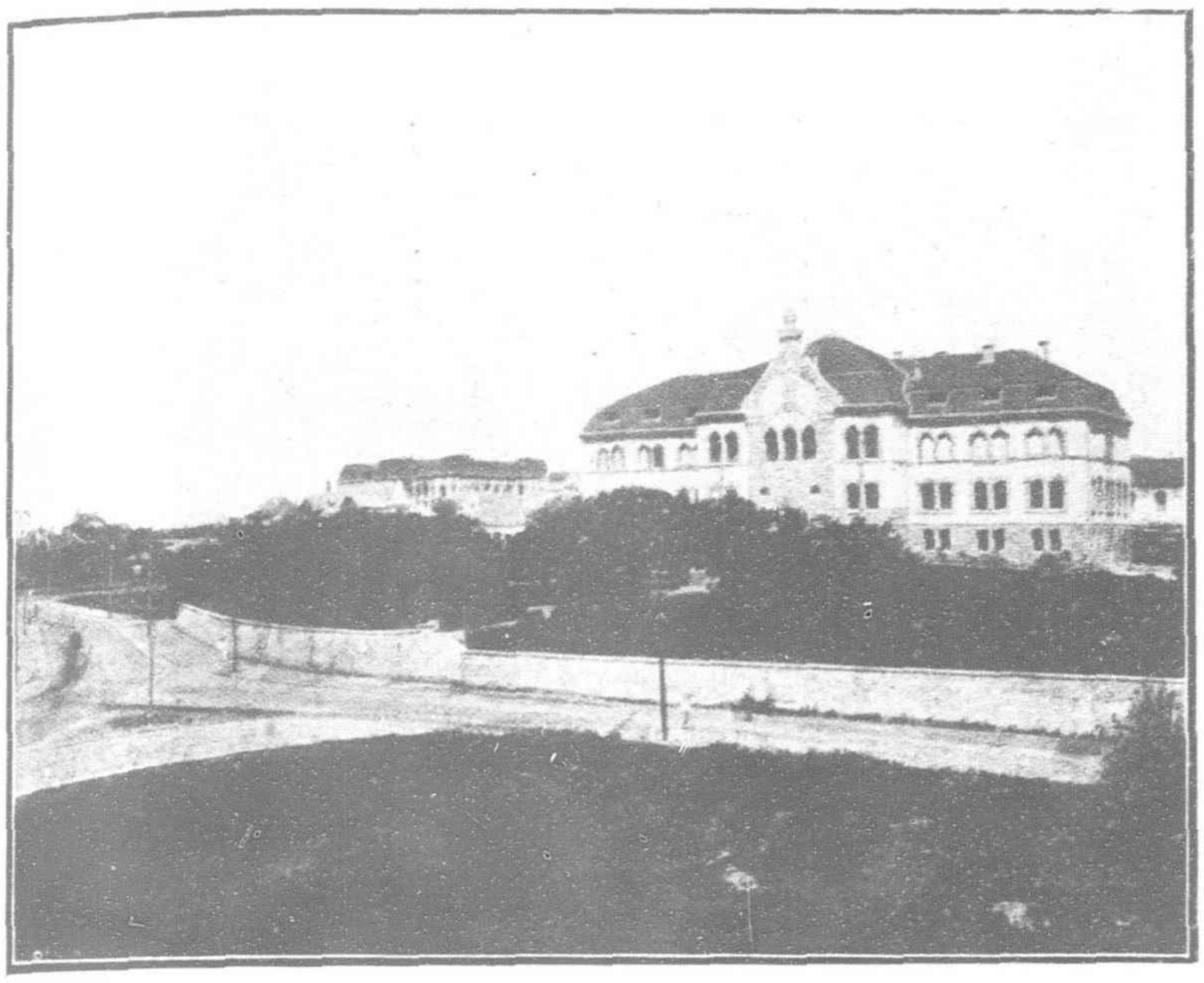
Articles.		1912	1913
Cotton goods, foreign:			
Shirtings—			
Gray, plain	pieces	323,418	382,304
White, plain	do	56,333	95,204
Sheeting—			
American	do	123,838	82,227
English	do	17,929	7,830
Japanese	do	184,331	243,542
Drills—			
American	do	18,460	22,814
English	do	2,961	4,323
Japanese	do	9,695	4,710
Jeans—			
American	do	2,310	1,780
English	do	102,970	131,085
T-cloths—			
English	do	272,774	392,992
Japanese	do	28,260	25,813
Lawns	do	10,349	26,461
Chintzes and prints	do	94,962	136,488
Printed drills, etc	do	12,168	13,316
Printed sateens	do	10,181	15,596
Printed T-cloths	do	24,360	21,875
Italians and lastings	do	388,285	452,764
Dyed shirtings, etc	do	3,651	5,379
Turkey red cambrics, etc	do	58,557	87,289
Spanish stripes	do	6,348	12,636
Cotton flannel	do	16,445	14,354
Colored woven cottons	yards	52,916	125,457
Velvets and velveteens	do	18,819	51,912
Cotton blankets	piece	26,579	31,414
Handkerchiefs	dozens	14,528	17,066
Towels	do	81,591	126,968
Cotton yarn—			
English	hundredweight	24	4
Indian	do	86,668	91,412
Japanese	do	217,636	279,909
Cotton goods, Chinese:			
Sheetings, Shanghai	pieces	16,050	27,971
Nankeens	hundredweight	3,403	1,668
Cloth, native	pieces	26,764	24,776
Cotton yarn	hundredweight	63,872	81,704
Woolen and cotton mixtures:			
Union and poncho cloth	yards	38,003	83,878
Cloth	do	3,366	2,060
Lastings	pieces	1,157	1,780
Long ells	do	530	516
Spanish stripes	yards	2,675	2,656
Silk piece goods	pounds	29,452	87,312
Metals, foreign:			
Brass, etc., sheets	hundredweight	889	987
Copper, sheets, etc	do	796	1,836
Iron and mild steel—			
New	do	31,175	50,972
Old	do	152,208	186,932
Lead, in pigs	do	3,744	5,504
Steel	do	7,160	10,020
Tinned plates	do	42,272	30,807



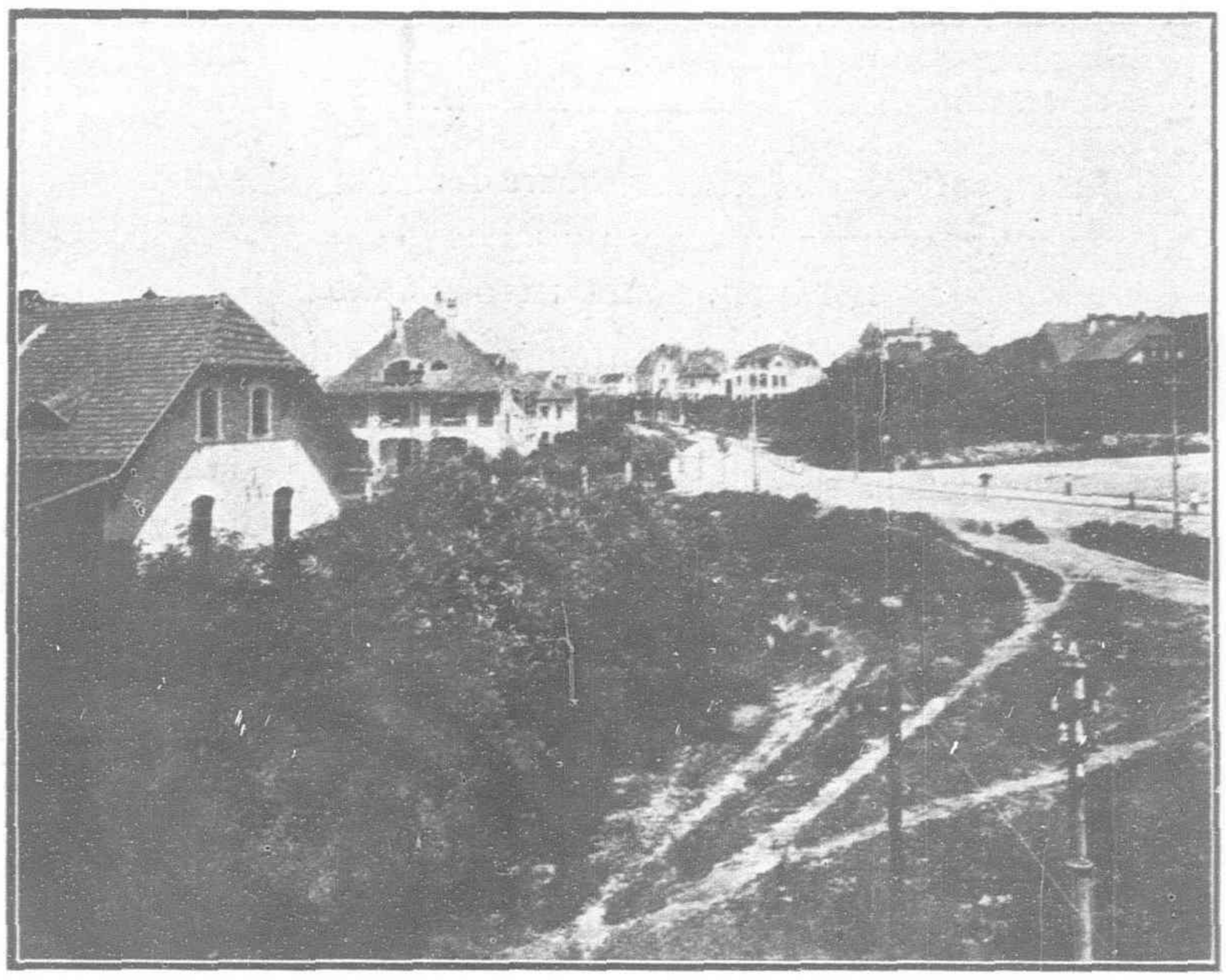
Police Headquarters.



Governor's House and Park.

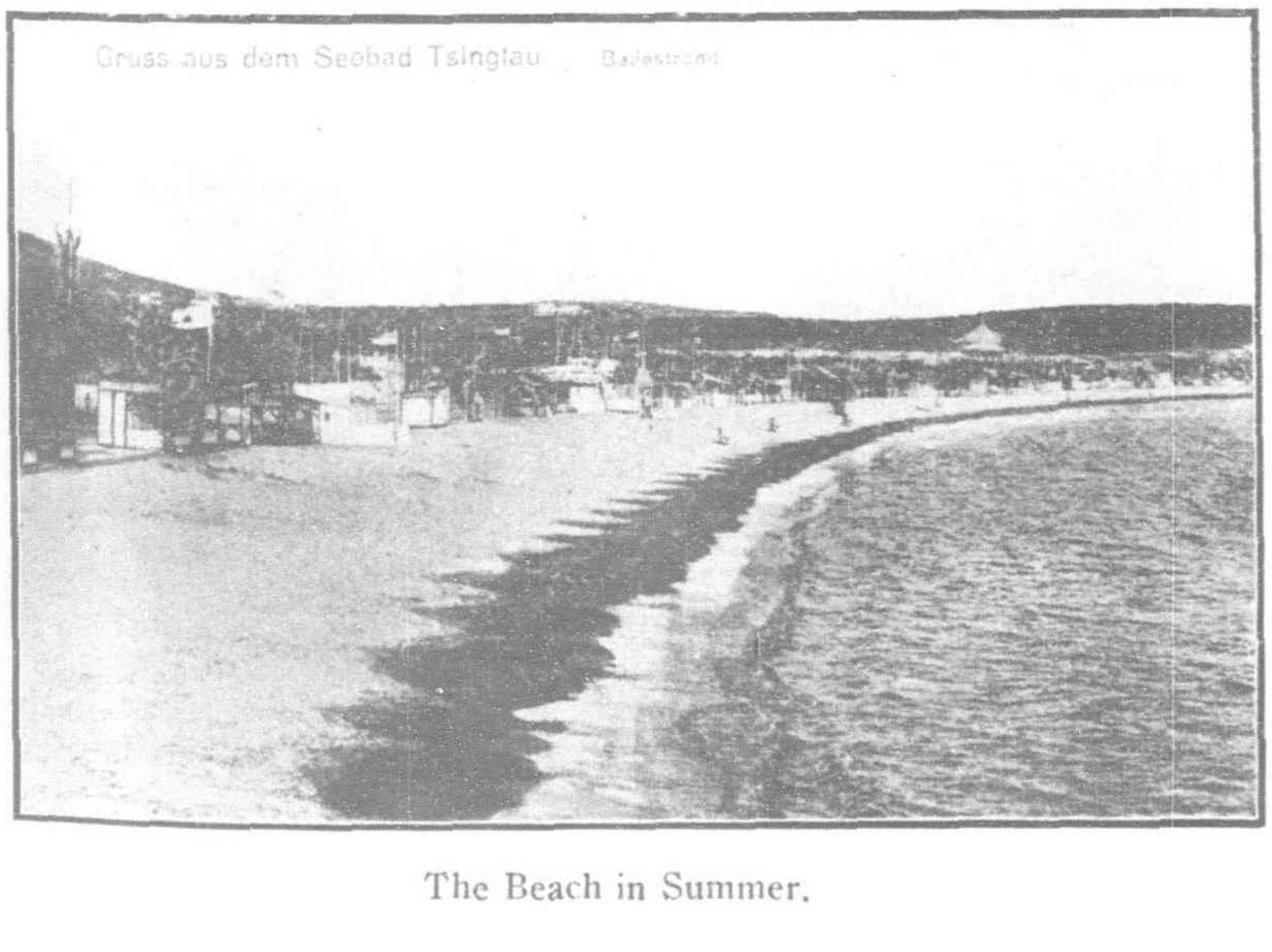


Government School.



Hohenlohe Road.

Metals, Chinese:			
Iron, pig	do	2,840	3,000
Steel	do	187	609
Sundries, foreign:			
Bags, gunny	pieces	1,160,631	1,068,804
Buttons, brass	gross	105,856	118,209
Candles	hundredweight	3,377	2,663
Chinaware, etc	value	$24,458	$46,246
Cigarettes	hundredweight	201,408	307,332
Cigars	do	35,877	12,341
Coal	tons	3,023	....
Dyes, paints, etc.—			
Aniline	value	$174,747	$223,506
Indigo, artificial	hundredweight	37,193	46,904
Lead, white, etc	do	2,996	3,839
Electrical materials	value	$25,564	$29,058
Flour	hundredweight	107,580	102,385
Glass, window	boxes	4,468	16,664
Glassware	value	$16,847	$13,260
Lamp ware	do	$34,446	$44,804
Matches, Japan	gross	7,745,107	6,610,566
Mats	pieces	228,806	519,890
Mining materials	value	$34,531	$18,318
Needles	thousands	322,908	534,605
Oil—			
American	gallons	10,690,769	5,111,727
Russia	do	1,529,920	1,754,962
Sumatra	do	4,126,690	2,497,376
Paper	hundredweight	28,016	78,440
Pepper, black	do	6,353	5,421
Railway plant, materials	value	$542,245	$534,838
Seaweed	hundredweight	77,376	48,968
Soap	value	$34,235	$49,007
Soda	hundredweight	47,536	50,967
Stores, household	value	$84,134	$89,226
Sugar—			
Brown	hundredweight	213,420	88,694
White	do	88,694	52,627
Refined	do	60,114	113,880
Candy	do	38,314	26,945
Timber—			
Hard	cubic feet	283,454	23,983
Soft	square feet	2,507,969	4,659,991
Wines, beers, spirits—			
Beer, porter	value	$44,147	$34,623
Wines, spirits	do	$62,335	$74,823
Sundries, Chinese:			
Arsenic	hundredweight	3,013	5,352
Beans	do	27,164	1,551
Cereals, rice	do	59,545	72,039
Cigarettes	do	17,291	21,349
Cotton, raw	do	....	....
Flour, mill	do	50,095	95,425
Medicines	do	7,715	9,304
Oil, wood	do	17,431	17,680



The Beach in Summer.

Tribüne auf dem Rennplatz TSINGTAU

The Grand Stand at the Race Course.

Paper—			
First quality	do	6,001	9,669
Second quality	do	103,019	89,919
Joss	do	12,924	10,875
Silk piece goods	do	231	192
Straw braid	do	1,192	1,519
Tea	do	10,800	13,749
Timber, softwood	square feet	2,369,278	2,473,356
Opium	pounds	10,948	25,884

DETAILS OF THE IMPORT TRADE.

The general increase in cotton goods was due to the greater prosperity because of the abundant harvest. American trade, however, suffered in both jeans and sheetings. The Japanese have advanced in sheetings at the expense of the United States and in jeans at the expense of Great Britain. Gunny bags are imported from Calcutta.

American canned goods continue to find a market in Tsingtau, especially in summer. The Japanese have made steady advances in the trade in refined sugar since 1911. They refine much of the Java and some of the Philippine sugar, which they sell in competition with Hongkong sugar. It is of good color, but during the summer is affected by moisture. The trade in soap is largely in the hands of the Japanese, who have flooded the market with cheap toilet soaps made especially for this country.

The heavy increase in the imports of soft timber is accounted for by the extensive building operations mentioned. The importation of wooden matches is almost entirely in the hands of the Japanese, American and European competition being practically impossible.

There was no expansion in the trade in kerosene in 1913, the actual sales remaining about the same. The importation has fallen off decidedly, as the three companies operating here realize that the market is overstocked. American oil alone dropped more than one-half in 1913, a loss which is more apparent than real. The line projected from Kaumi on the Shantung Railway should assist oil importers. Imports of oil in cases have fallen off in favor of oil in tank steamers.

CIGARETTES—WINES AND BEER.

The trade in cigarettes is very extensive, especially as it caters to the entire Chinese population. The business is nearly all in the hands of the British-American Tobacco Co., an Anglo-American concern. It recently established a tobacco farm at Fangtze, where it is proposed to instruct the Chinese in the cultivation of tobacco leaf.

There has been a slight increase in the importation of wines and spirits and a slight decrease in the importation of beer and porter. The general consumption is about the same. Whisky comes from Great Britain while most of the beer is locally made, the remainder coming from Germany.

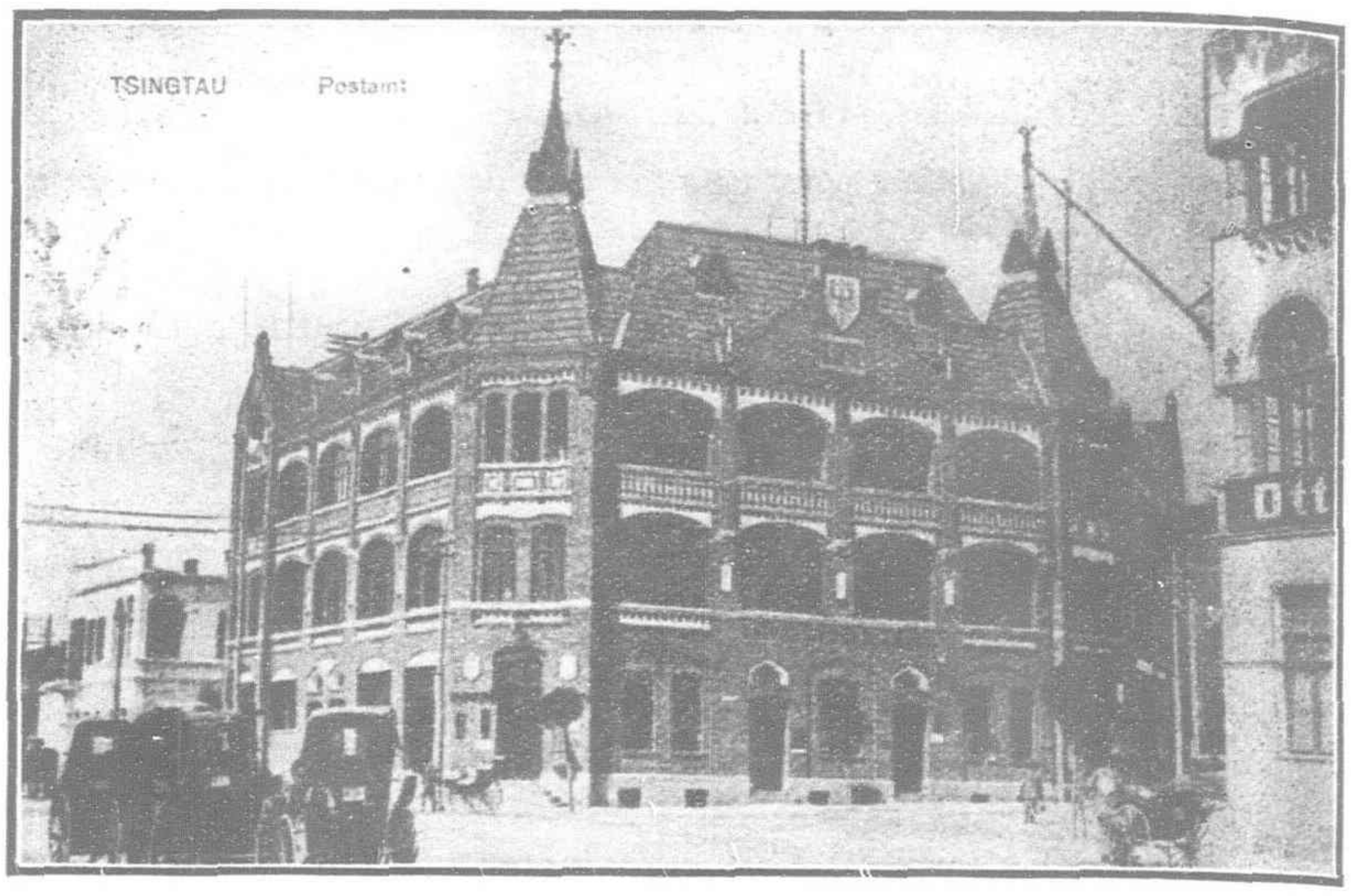
AUTOMOBILES AND SEWING MACHINES.

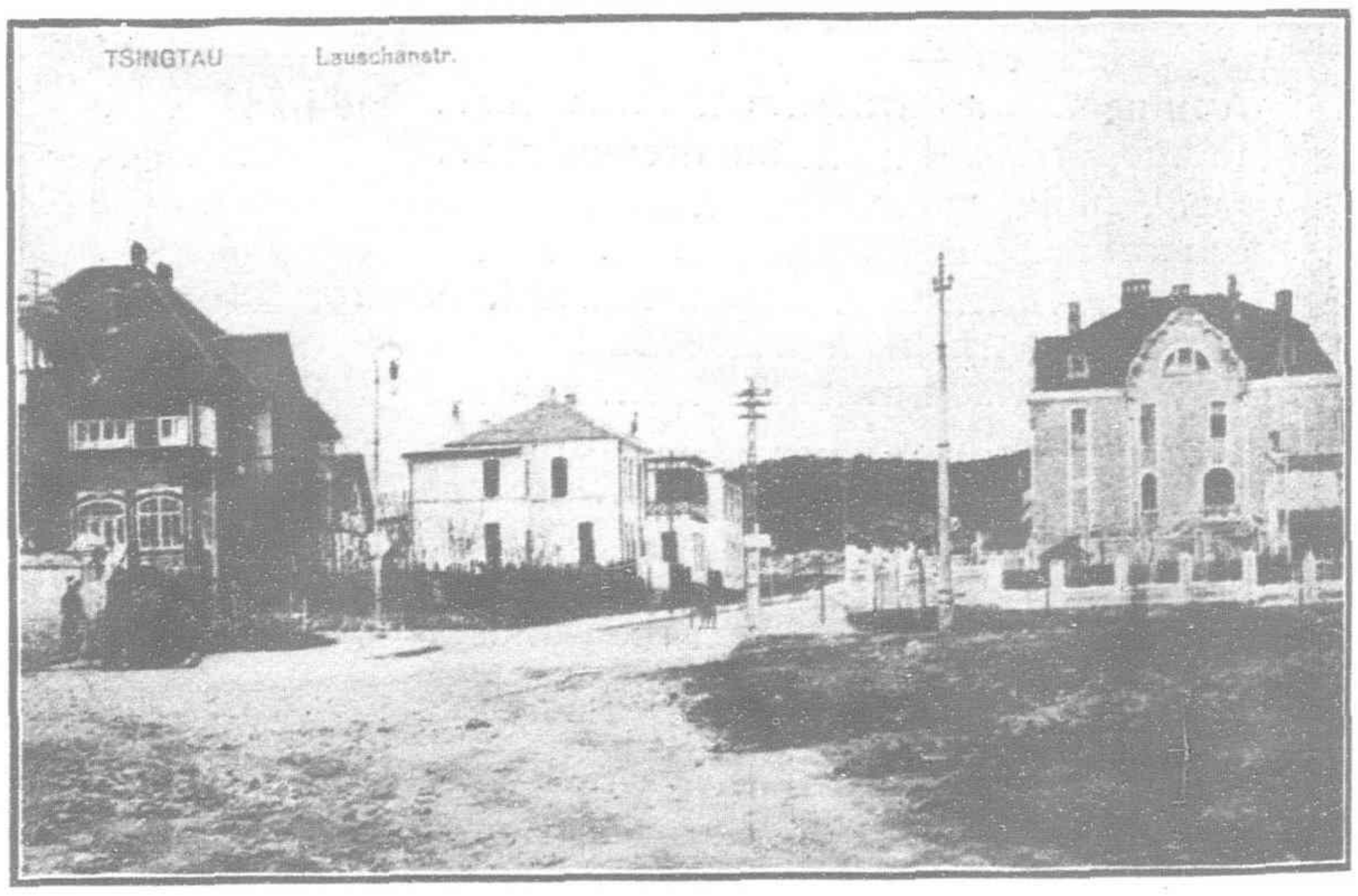
The good roads and general prosperity of Tsingtau would indicate that there is an opportunity for the sale of automobiles. German cars have been sold here by an agent, but a light, cheap American machine, selling for about $500, should find a ready market.

The establishment by the Singer Sewing Machine Co. of the Shantung agency at Tsingtau in 1912 has been warranted by the increase of business. More sewing schools have been opened, and the trade bids fair to develop rapidly in the next few years.

PRINCIPAL EXPORTS.

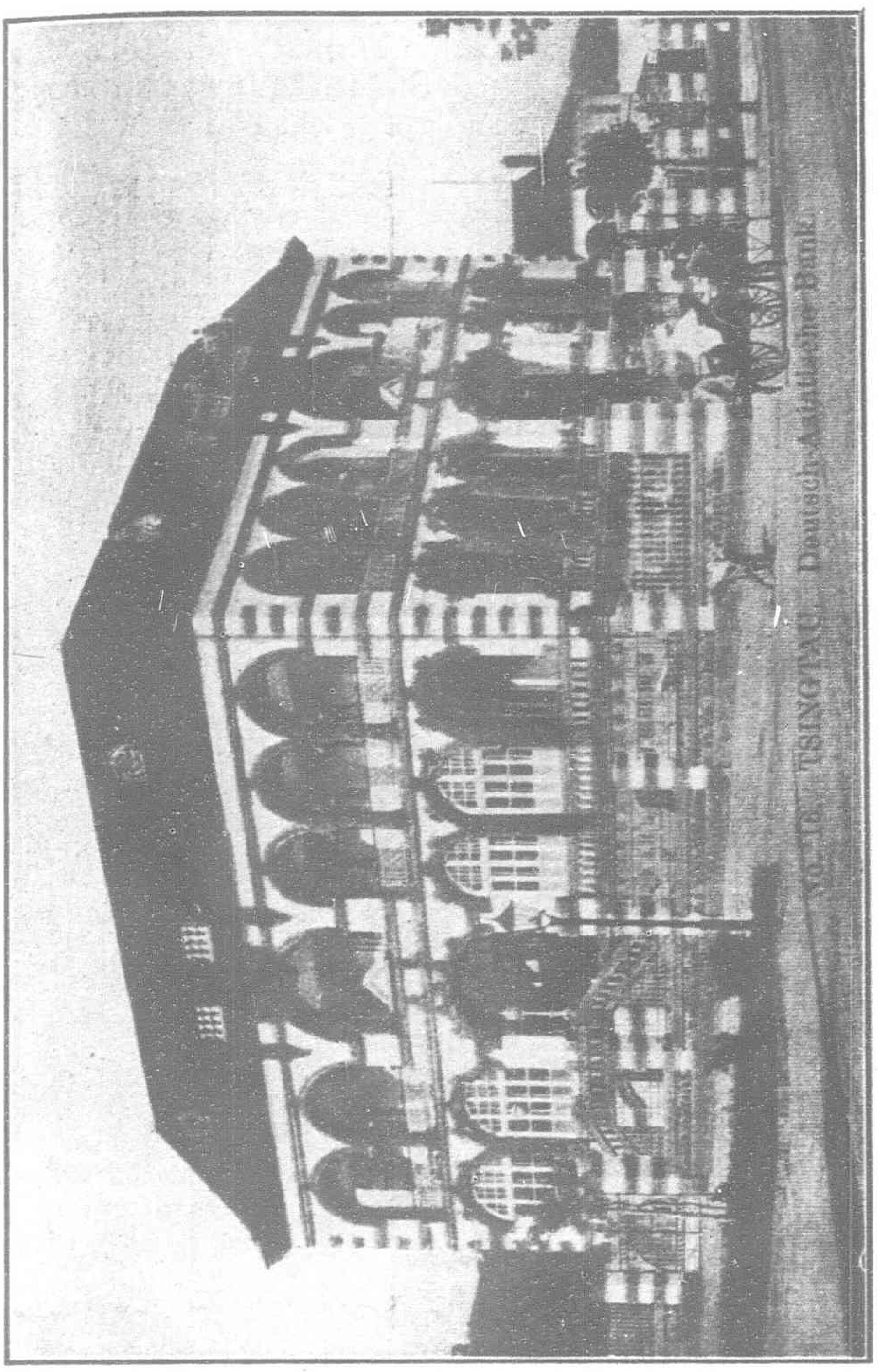
Foreign exporters consider their trade as unsatisfactory in 1913. The customs figures show a considerable gain over the preceding year, but these figures are misleading. For example they show a decline in straw braid of only about 2,300,000 pounds, while the actual loss is estimated at about $1,400,000. Since much produce is shipped on consignment to Shanghai where it is transshipped to foreign countries, it is difficult to get an exact idea of the foreign trade from the customs statistics. The principal articles of export from Tsingtau are indicated below:



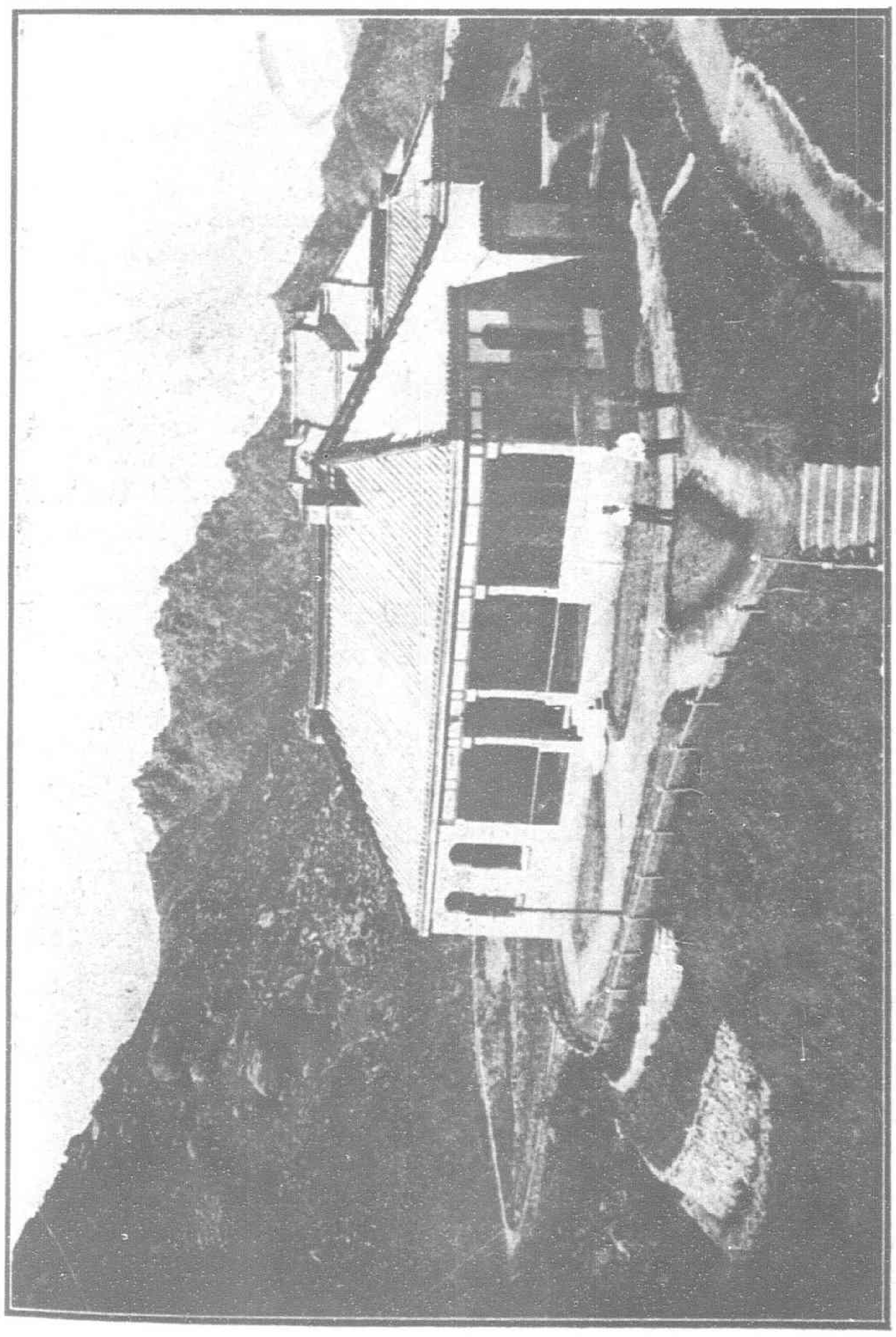


VIEWS OF TSINGTAU.

1.—Post Office.
2.—Shantung Strasse.
3.—Lao Shan Strasse.
4.—Shantung Strasse.



The Deutsche-Asiatisch Bank at Tsingtau.



Bungalows on Laoshan, near Tsingtau.

Articles.	1912 (Quantity).	1913 Quantity.	1913 Value.
Bean cake......hundredweight...	94,231	160,679	$174,183
Bristles ....do......	3,111	4,900	270,802
Cattle...................number...	16,665	28,413	834,848
Cotton, raw ...hundredweight...	92,760	64,366	736,530
Dates ....do......	....	116,645	281,014
Egg products ....do......	25,639	14,521	421,484
Eggs, fresh ....number...	20,834,840	27,056,000	130,356
Groundnuts:			
Unshelled..hundredweight...	50,661	153,132	354,643
Shelled ....do......	1,005,231	1,214,183	3,380,331
Hides, cow......... ....do......	38,081	51,809	936,251
Oil:			
Bean ....do......	51,668	35,572	177,232
Groundnut.............do......	307,983	196,163	1,323,156
Silk:			
Raw ....do......	9,133	6,533	1,390,947
Pongee ....do	5,260	9,192	2,105,034
Skins, goat ....number...	489,783	131,826	37,457
Straw braid ...hundredweight...	139,639	116,384	3,054,841

The principal articles exported by seagoing junks were the following:

Articles.	1912	1913	Articles.	1912	1913
Bean cake.cwt..	585	59,673	Groundnut, in shell .. cwt..	12,469	10,564
Caps, felt ....number..	240,895	452,500	Oil:		
Cereals, wheat.. ....cwt..	6,044	10,928	Bean...cwt..	74,475	87,655
Coal......tons..	5,416	6,337	Groundnut ... .cwt..	75,611	42,331
Cotton, raw..... ....cwt..	5,267	6,019	Walnuts..cwt..	11,639	15,033

SILK AND COTTON.

The last year witnessed an increase of 75 per cent. in the export of pongee silk, the 9,192 hundredweight shipped representing $2,105,034 gold in value. At the end of 1912 the trade was brisk and prices were high, and this continued well through 1913. Tsingtau is in a favorable position to handle the pongee trade, both because it is connected by rail with the weaving districts and because it is nearer than Tientsin to Shanghai, where goods are usually shipped for foreign export. Chefoo still does a large business, but is handicapped by having a poor harbor and no railway. The Manchurian crop fell off 10 per cent. in 1913, owing to shortness of rain, while the local crop of the best quality increased 20 per cent. The trade with the United States in pongee jumped from $666 to $14,202.

Last year there was a loss of 30 per cent. in the export of raw cotton, as compared with 1912. This was the result of abundant crops and the consequent low prices in other Provinces. The customs have established a testing department to determine the percentage of moisture, which should not exceed 12 per cent. This has greatly improved the quality of the raw cotton, and only a few bales have had to be opened up and dried again.

DECLINE IN STRAW BRAID EXPORTS.

The causes for the decline in the exports of straw braid are: (1) The lessened demand in Europe and America, the results of new styles; (2) the introduction on the market by the Japanese of a paper straw braid imitation difficult to recognize from the genuine article, which new product is finding favor in some foreign markets on account of its cheapness; and (3) the substitution of coarse, cheap braids for the finer qualities. The decline in the weight of the straw braid exported has not served as a criterion of the loss incurred, therefore, since the trade in fine, delicate braids greatly declined. Straw braid is by far the greatest native export to the United States.

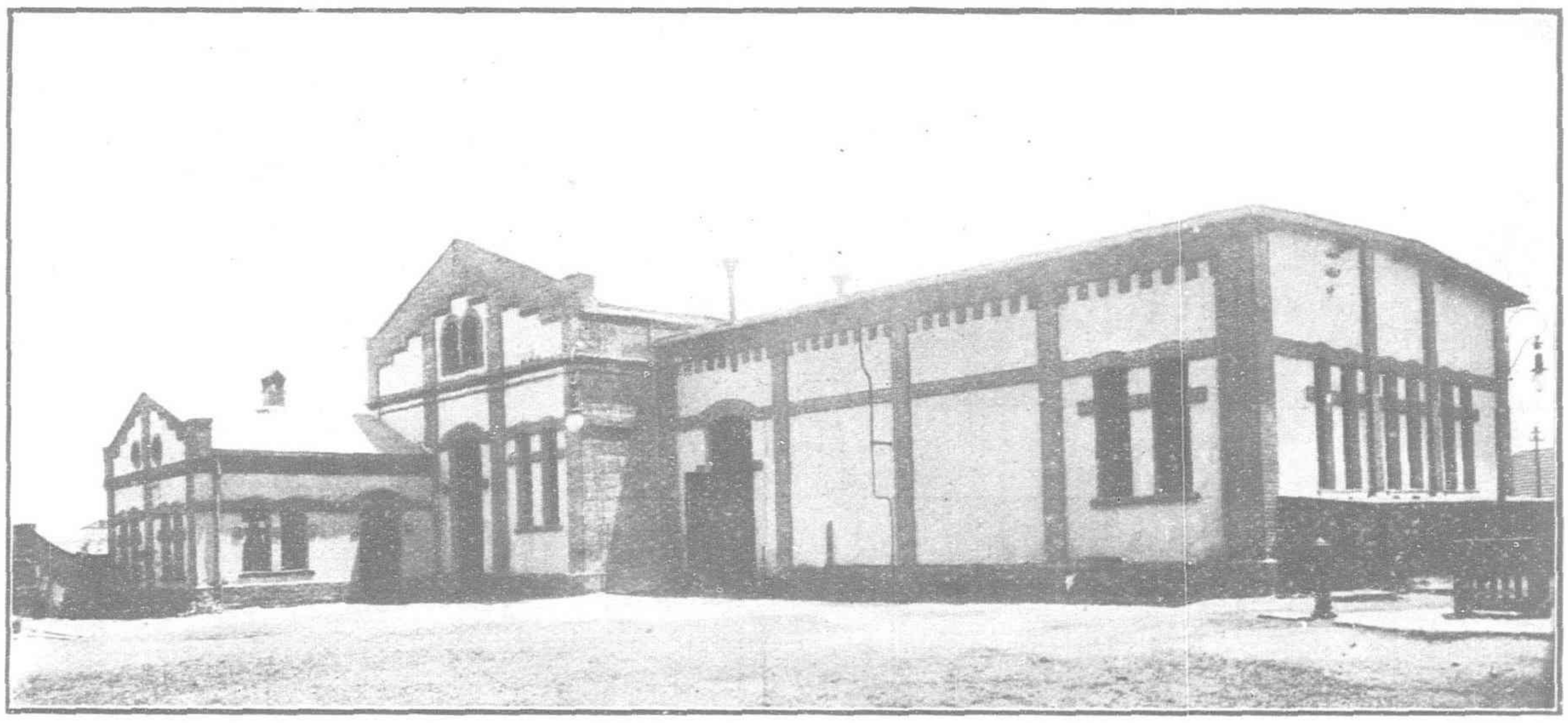
GROUNDNUTS, BEAN OIL, AND BEAN CAKE.

The groundnut crop was very large in 1913, but the high freight rates maintained by the local steamship companies on unshelled groundnuts prevented foreign shippers from benefitting very extensively. There is a tendency on the part of Chinese dealers to ship to Hongkong in order to get the benefit of both the southern Chinese and European markets. This industry is doubtless rapidly increasing.

The exports of bean oil were less than in the preceding year. As Chinese buyers have been able to overbid their European and American competitors, local business men find it profitable to sell to them rather than to export on consignment, which involves risk and speculation. The bean-cake export represents a normal year in this industry. The traffic was mainly by junk.

CATTLE, HIDES, AND BRISTLES.

The cattle export business is all with Vladivostok. Five firms are engaged in shipping beef in winter and live cattle in summer to this point. Tsingtau has the advantage over its rival in this trade (Tientsin) in two respects: (1) On account of the Shantung Railway it is in better communication with the interior of Shantung Province and Honan Province, the two centers of production, and (2) there is a large Government slaughterhouse in Tsingtau, which is well managed and has the services of two veterinary surgeons who are employed during the entire slaughtering season.



Electrical Works at Tsingtau Erected by the Siemen's China Electrical Co.

The hides imported by the United States are mainly cowhides. Hide shipping is hampered because Tsingtau has no adequate press of sufficient strength, and press-packing charges are exorbitant. At present it is difficult to get the measurement attainable at other ports. The year 1913 opened with high prices, which advanced until February; then a reaction set in which kept prices down until July. The market was low in October, but in December showed considerable improvement, due to the scarcity of raw materials in Europe and America. The political troubles in the summer months of 1912 in the Yangtze Valley slightly benefited Tsingtau in hide exports.

The exports of goatskins represent a normal year in spite of the fact that the customs statistics indicate a huge decline, for, in the early part of 1912, owing to the unstable political conditions in Hupeh Province, certain shipments were sent by rail to Tsingtau and transhipped to Shanghai, cargo which otherwise would have been shipped from Hankow. The great demand for bristles kept prices well advanced, but the quality of the bristles was poor, especially in the shorter lengths.

DECLARED EXPORTS TO UNITED STATES.

The declared exports to the United States were $129,718 less than in 1912, a loss of 11.5 per cent. The total represents about 5.3 per cent. of the total export trade of Tsingtau. The decline is accounted for by the decrease in the shipping of straw braid. An examination of the annual declared export returns given in the table following shows that straw braid and bean oil fell off in export to the United States, while bristles, hides, groundnuts, wool, and pongee silk increased. The declared value of exports to the United States, as invoiced through the American Consulate in 1912 and 1913, was as follows:

Articles.	1912	1913	Articles.	1912	1913
Silk:					
Pongee	666	14,202			
Raw......	483	....			
Bean oil ...	$35,572	$5,849	Straw braid ...	$1,035,305	$756,121
Bristles ...	21,912	99,146	Walnuts...	....	3,613
Egg products ...	23,095	32,846	Wool	....	12,351
Groundnuts......	2,351	15,785	Zoological specimens ...	241	150
Groundnut oil	3,187	....	Total...	1,129,261	996,006
Hides......	6,387	54,673			
Household effects...	......	1,270			
Personal effects ...	62	....			

Coinage.—The small nickel coins in values of $\frac{1}{10}$ and $\frac{1}{20}$ Mexican dol., always exchangeable at this rate for Mexican dollars, which the German Government has issued, so far amount to 35,000 dol. The first lot of 17,000 dol., issued in 1909, disappeared from the market in a very short time, which compelled the Government to issue another lot of 18,000 dol. in 1910.

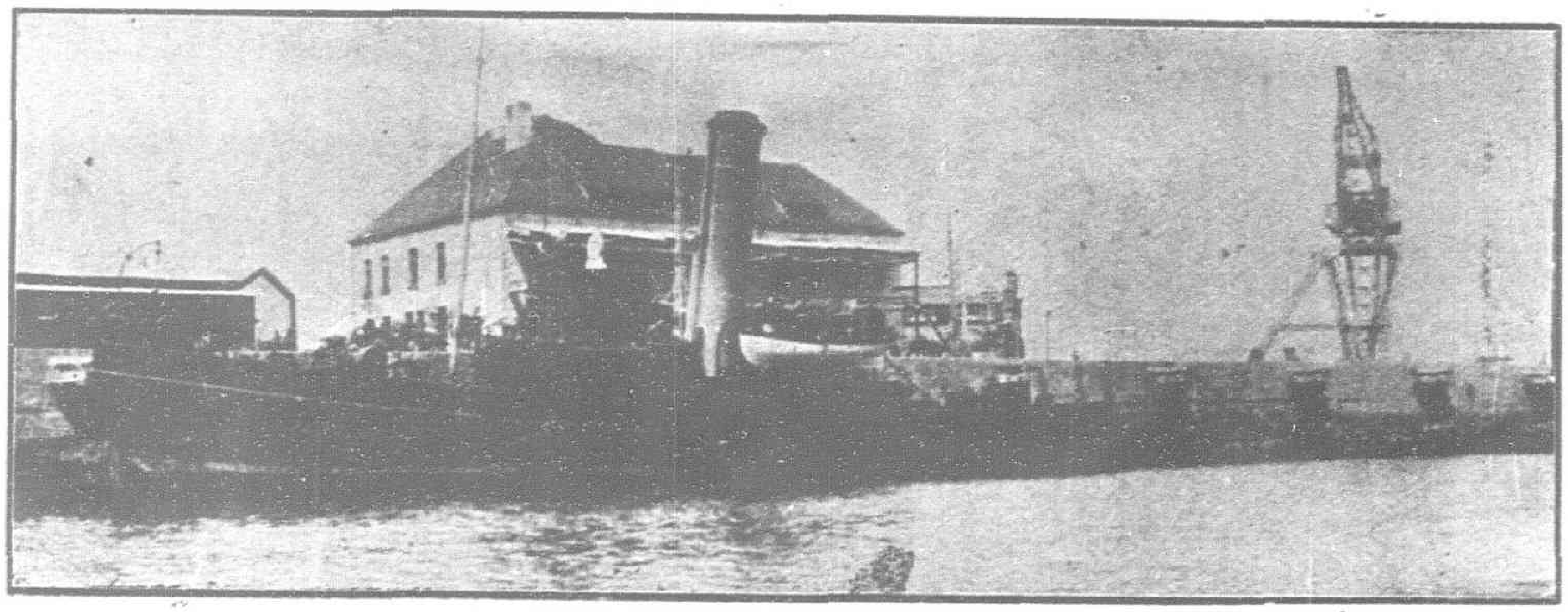
In spite of this there still seems to be a great scarcity of this coin felt on the market, and according to information received from the railway and mining companies, retail firms of Tsingtau and missionaries in the interior, it appears that the Chinese in the province are paying a premium up to 5 per cent. for nickel coin in exchange for copper cash or hard Mexican dollars, and it seems to be natural that they do so.

The value of cash, besides being bulky to carry about, changes continually, while in receiving Mexican dollars in payment the Chinese coolie runs the risk of receiving bad coin; with the German nickel coin they are always certain of its value and that seems to be the main reason for its popularity.

Currency.—Currency Mexican dollars. The lowest exchange during the year under review occurred in March when a Mexican dollar was worth 1*s.* 7$\frac{5}{16}$*d.*, and the highest in November, 1*s.* 11$\frac{1}{8}$*d.*

With regard to cash, exchange in February was 2,550 and in October 2,740 to the dollar.

At the end of the year 1910 the Deutsch-Asiatische Bank had 970,000 dol. in circulation in notes.



Steam Tender Built and Engined by the Tsingtauer Werft.

TSINGTAUER WERFT, TSINGTAU

The Tsingtauer Werft was established in 1900 and originally employed only a few hundred men. It was then operated under the name Marine-Werkstatt and executed smaller repairs of the German cruiser fleet in the Far East. In 1905 a large floating dock of 16,000 tons lifting capacity was launched in Tsingtau, and moored in the new harbor, where at the same time a modern crane of 150 tons lifting capacity was built. In less than one and one-half years, from unpretentious beginnings there gradually grew the present large concern, which employs now an average of 48 Europeans and 1,400 Chinese.

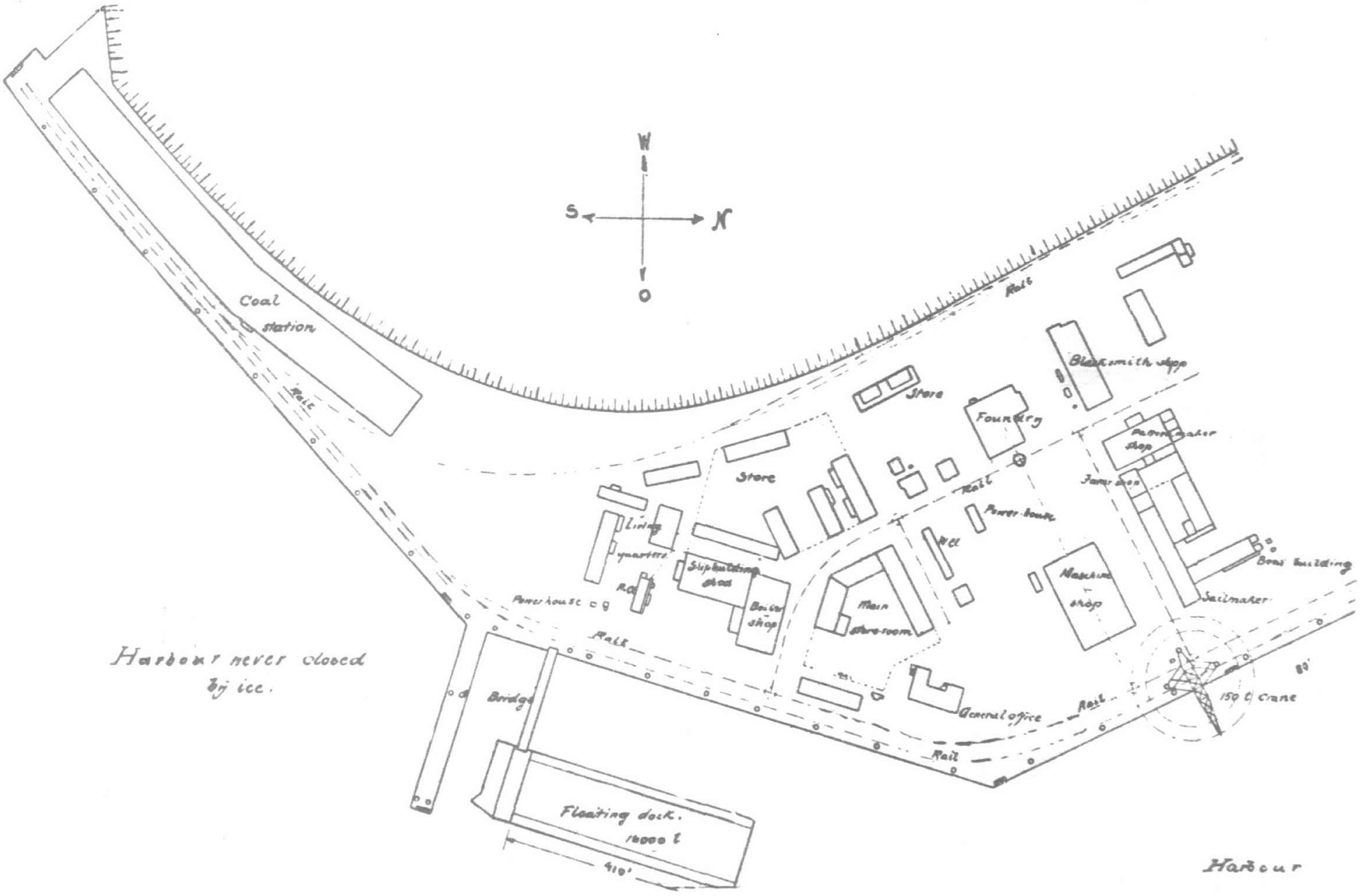
The general arrangement of the works may be seen from the accompanying plan, which shows the dock, the crane, the workshops, the coaling depot and the extensive system of railway connections.

In 1905 the large floating dock, which was built and constructed by the Guteboffnungshutte, Oberhausen, Germany, was launched and put at once into service.

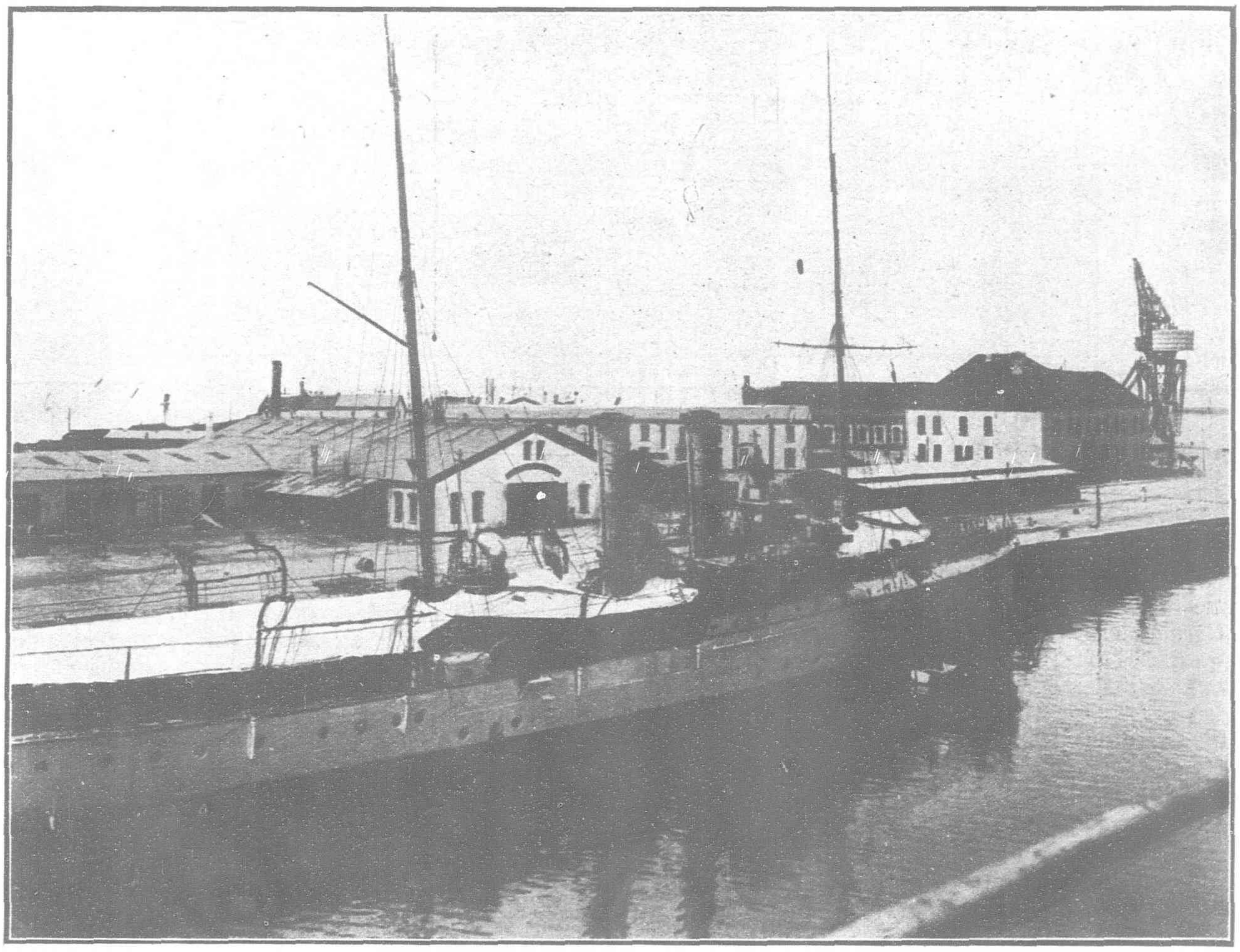
The dock measures 410 feet in length, 128 feet in breadth outside, 108 feet inside and 33 feet depth over keel blocks.

The dock's lifting capacity is 16,000 tons dead weight and it can accommodate vessels up to 460 feet in length. The dock is equipped with 10 centrifugal pumps driven by electric motors. The five dock pontoons are divided into eight watertight compartments each. The valves for each compartment are closed and opened by motors mounted on shafts, which run up the safety deck. Four windlasses, two five pumps and two 20 ton cranes at the ends of the dock are also operated by electricity. The lighting is electric and means are provided to supply the ships in dock with electric light, fresh water and steam heating. The dock is in every respect of modern design and construction and the width is large enough to allow increasing the length up to 660 feet, whenever the demands require it. The passage from the dock to the yard is provided for by means of a wide floating bridge.

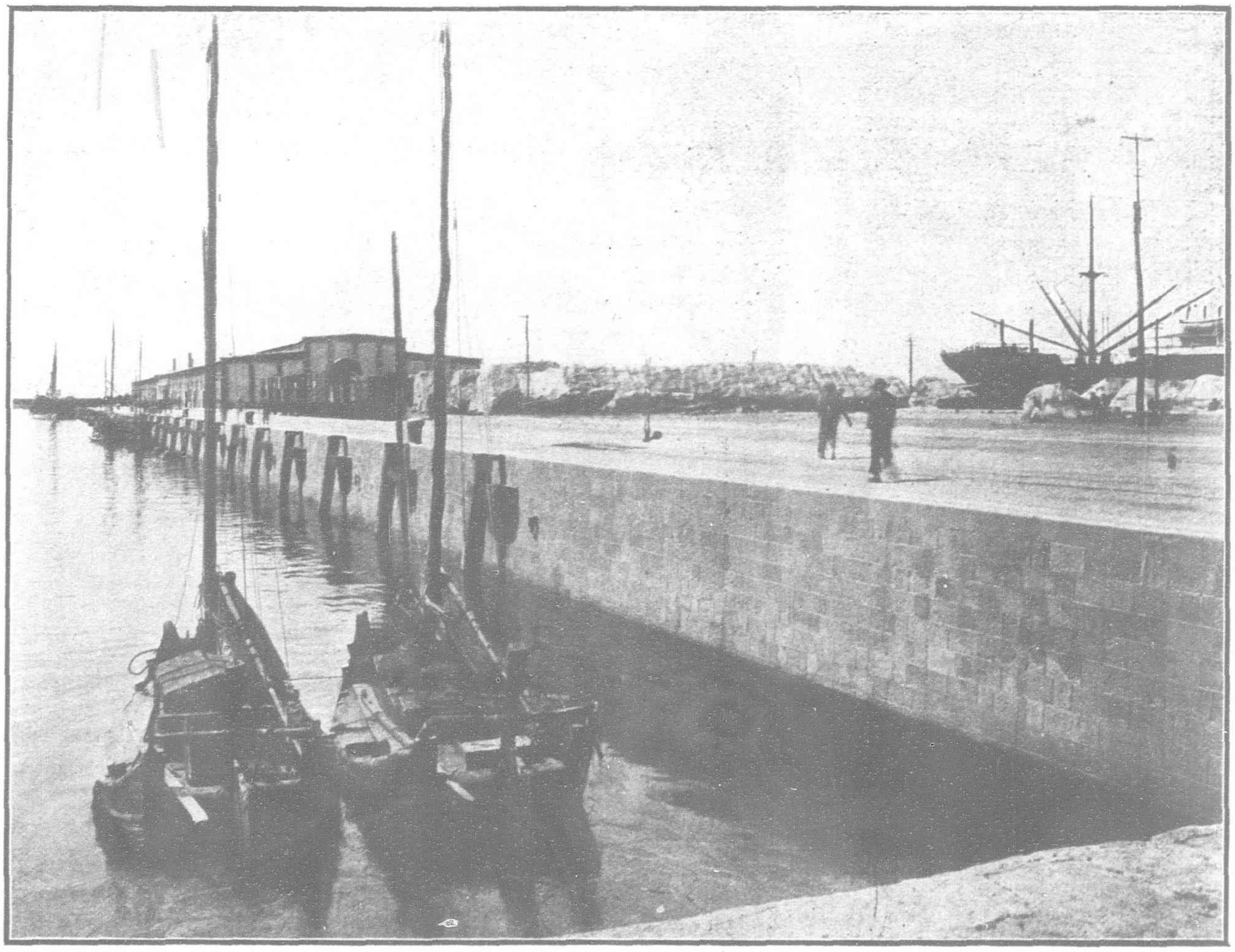
The whole length of the quays is 3,600 feet and at the



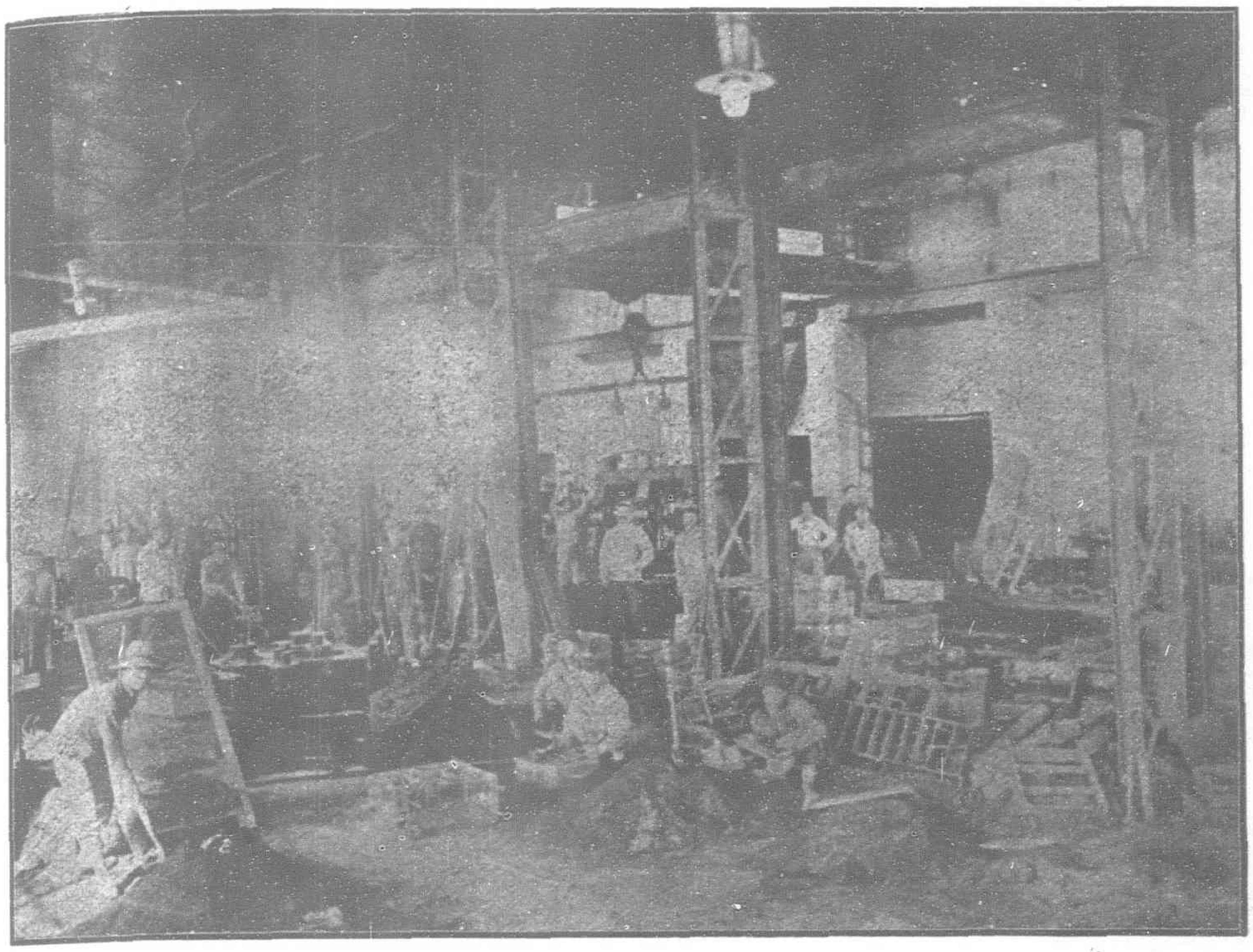
Plan of Tsingtauer Werft.



Tsingtau Wharf.



Wharf 2 at Tsingtau.



Foundry of the Tsingtauer Werft.

most convenient point near the engine shop the 150 ton crane is erected. The crane is built by the well known German firm of Bechem & Keetmann in Duisburg. It has its own power station where the current from the city works is transformed into 500 volts.

The crane can lift 150 tons with the large tackle at a distance of 40 feet from the quay, while with the small tackle 50 tons can be lifted at a distance of 80 feet from the quay.

The crane has often been tried to its utmost lifting capacity, i.e. 150 tons. Vessels up to about 160 feet in length are built under the crane and launched at a minimum of cost, transferring them by the crane into the water. It has proved very convenient for lifting boilers, smokestacks, guns, turrets and also steam launches on board of other vessels.

The general offices are situated in the center of the yard, being within easy distance of the shops and the main storeroom.

Electricity is used throughout the whole yard for light and power. The current comes from the central station in the city. There are 3 power houses. One is for operating the tools in the different shops and supplying electric light. The number of motors in the shops is 60. The second floor of the powerhouse is used for the large accumulator battery, which can supply light for 530 consecutive hours. Another power house is used for transforming the current for the dock motors. A third power house is used for transforming the current for the 150 ton crane.

The machine and erecting shop is 160 feet long and 110 feet wide, with three bays, and is equipped with the newest electrically operated machine tools, constructed in Germany and America. The roof construction provides an ample supply of light in addition to the side and end windows. The center bay, where the heavy tools are located, is provided with a 20 ton travelling crane with a height of 22 feet above the floor. The side bays are used for smaller and medium size tools, for the storeroom and for the electricians' shop.

The boiler shop is 140 feet long and 70 feet wide and is also equipped with tools for working the largest pieces. The foundry is about 100 feet long and is equipped with two cupolas capable of producing cast iron for pieces up to 5 tons weight. A 5-ton travelling crane is running over the main bay. The brass foundry is in the same building and pieces up to one ton can be cast there.

A large drying room is for drying the molds. Near to the foundry are located the pattern makers shop and the well arranged storage for patterns.

The forge and blacksmith shop is equipped with 4 electric hammers and 30 open fires for all kinds of blacksmith work. Outside of this building are the furnaces and the bending slabs for bending the frames for the vessels.

The shipbuilding shed and the place outside in front of it are devoted for punching machines, sheers, rolls, countersink machines, planers and drills of every description, and a floor for laying out steel construction.

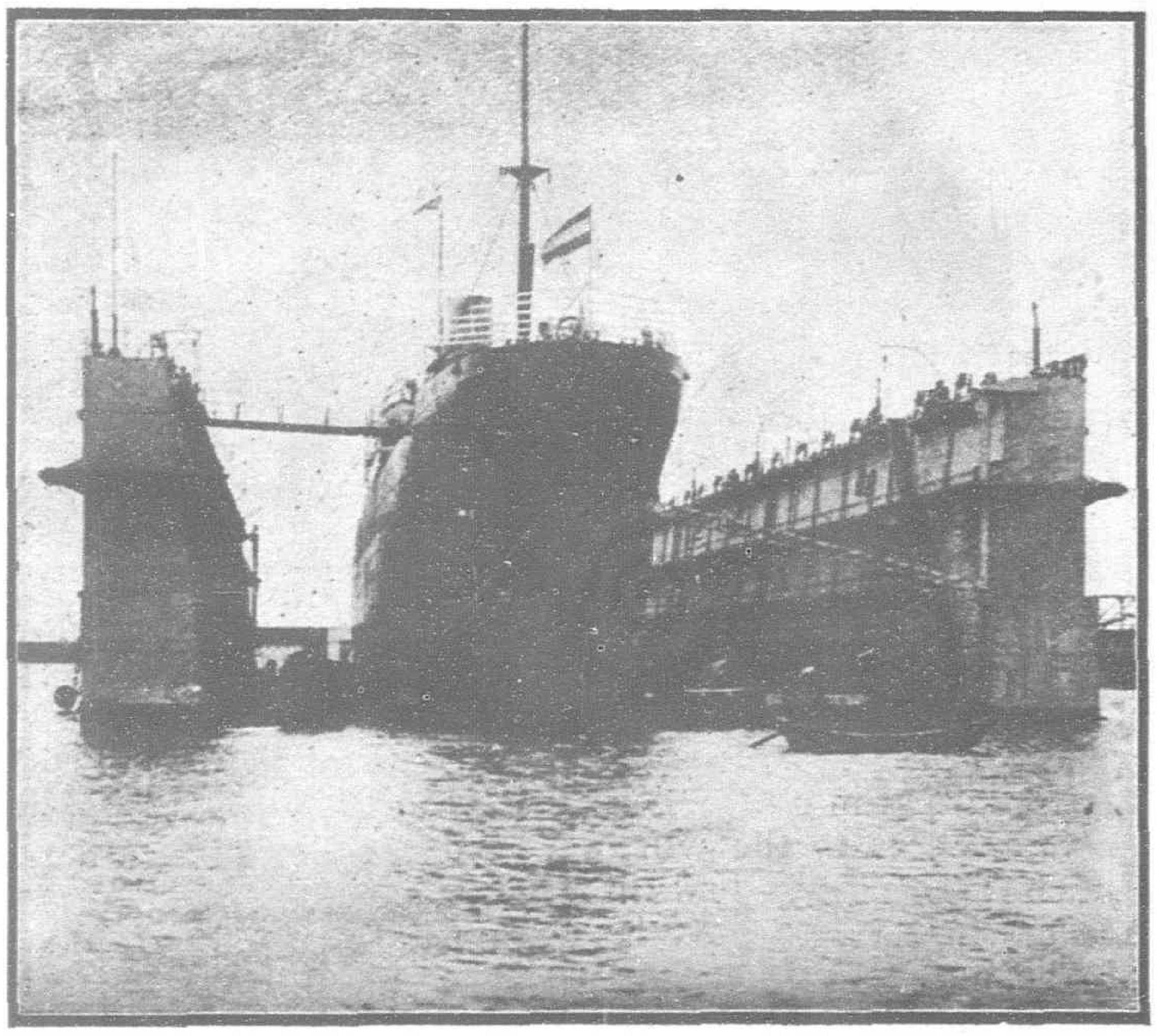
The joiner shop is capable of producing the finest cabinet work and is connected with the paint shop, and all kinds of upholstery can be done.

There are furthermore a sail-making, boat-building, coppersmith shop and filecutting shop.

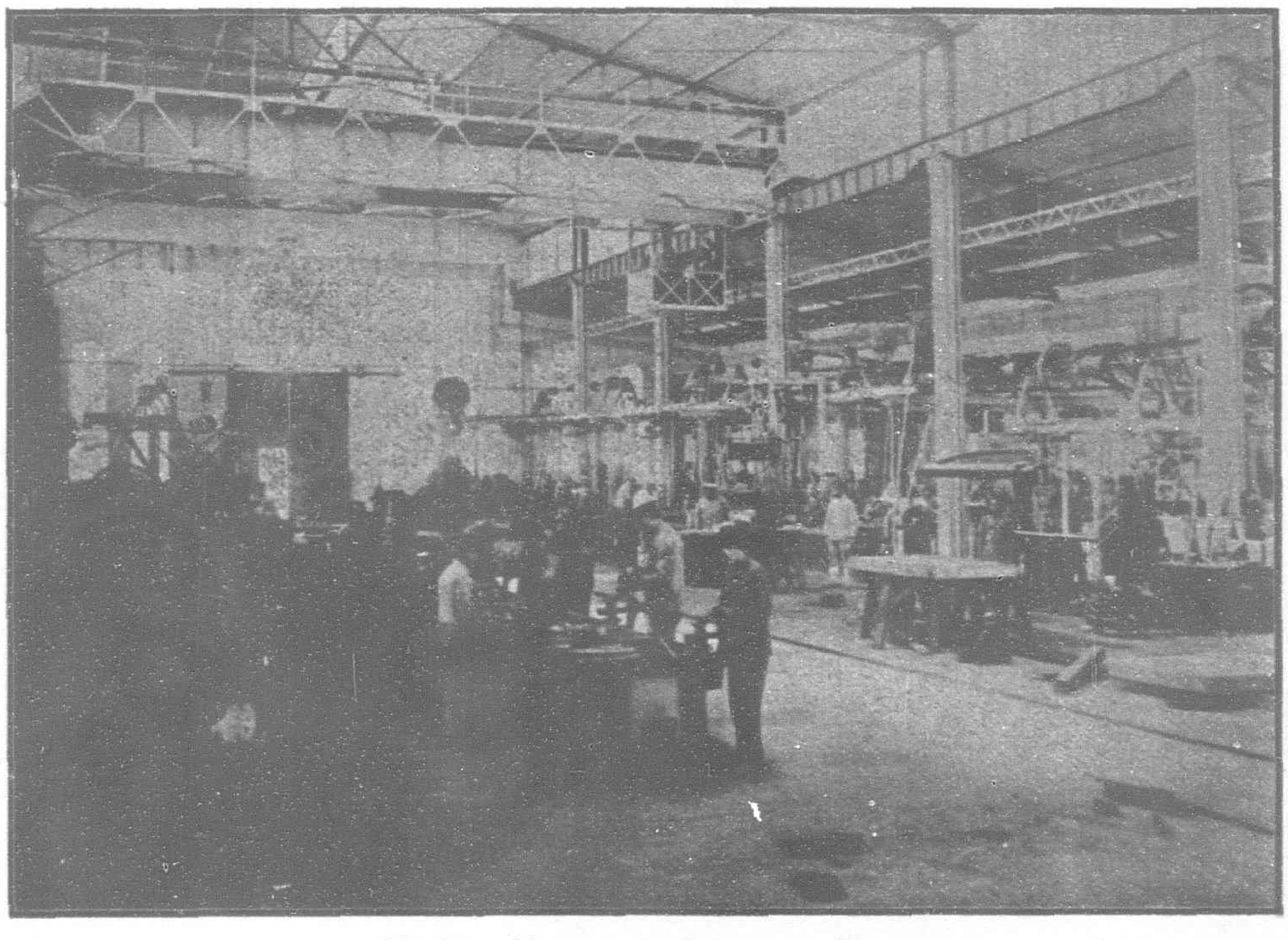
A special building is equipped with a plant for nickel plating, silverplating and gilding metal.

For transporting of materials and articles between the different shops a wide system of rails is laid out throughout the yard.

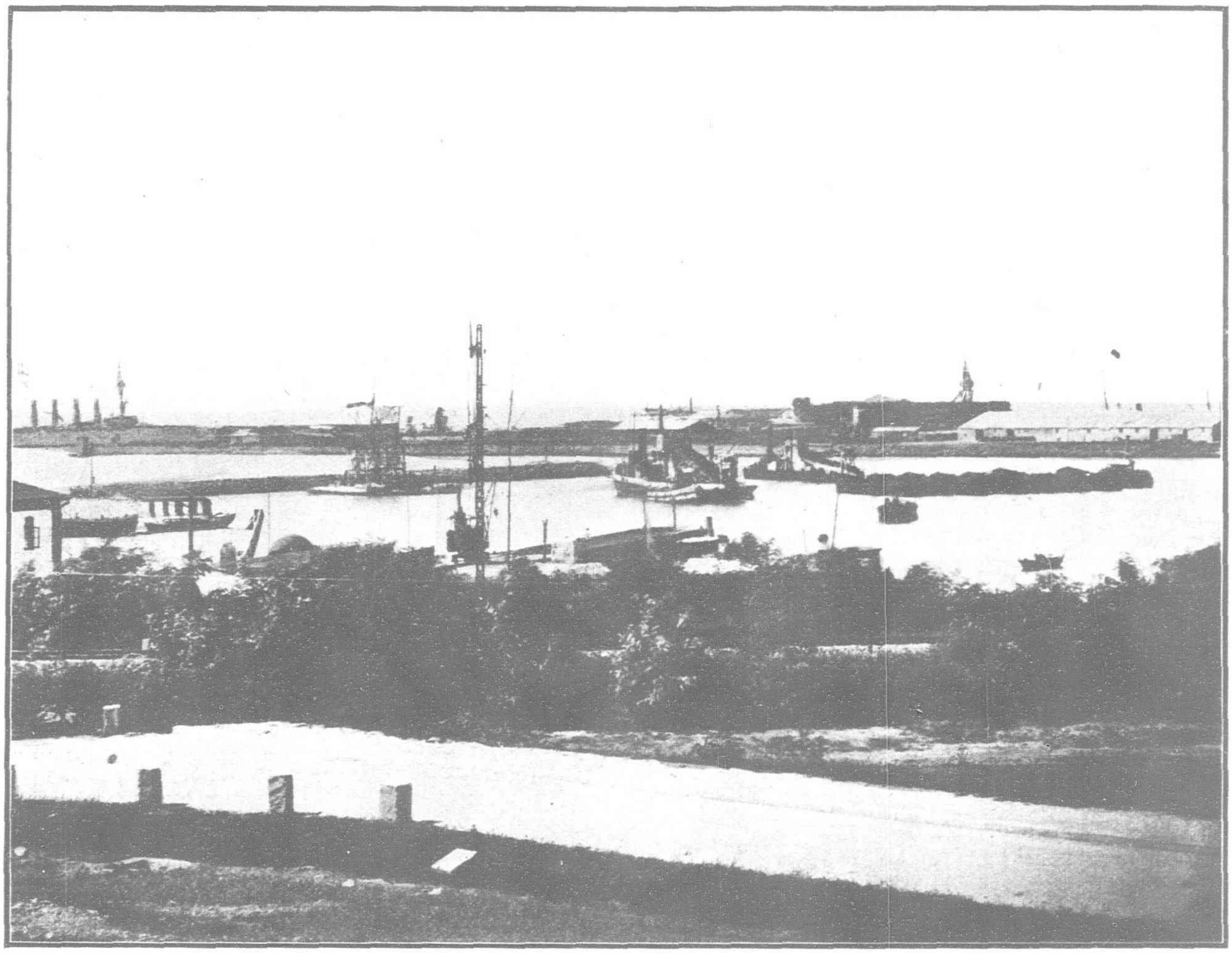
There are furthermore to be mentioned the boilerhouse from where steam is supplied for heating purposes for all buildings and for ships, while laying in dock or alongside the pier. Living quarters are provided for officers and men together with galleys and bathrooms, while ships are under



Floating Dock at Tsingtau.



Machine Shop of the Tsingtauer Werft.



View of the Harbor, Tsingtau.

repair. From the foregoing it will be understood that the works are equipped to do any kind of work, such as ships, engines, boilers, and the various items of equipment and fittings including joinery, cabinet work and upholstery.

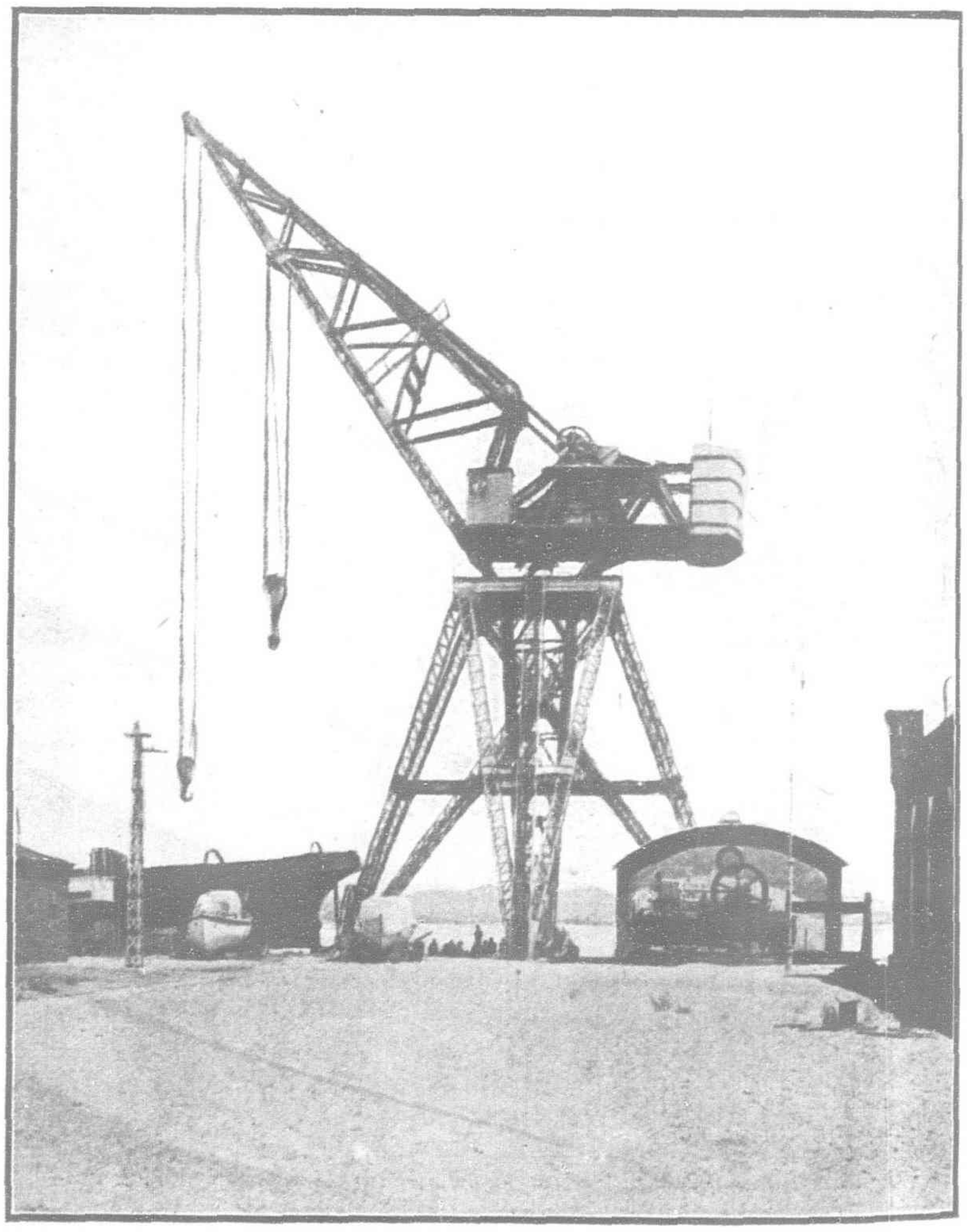
In the year of 1902 the yard started to put in every shop a certain number of Chinese boys as apprentices to the work which number was increased every year. These boys had to learn for four years each their trade and proved to be very skilful. There are now working of the number about 400, Chinese, which form a staff of foremen or mechanics who have all been educated in the yard.

TSINGTAU HARBOUR WORKS

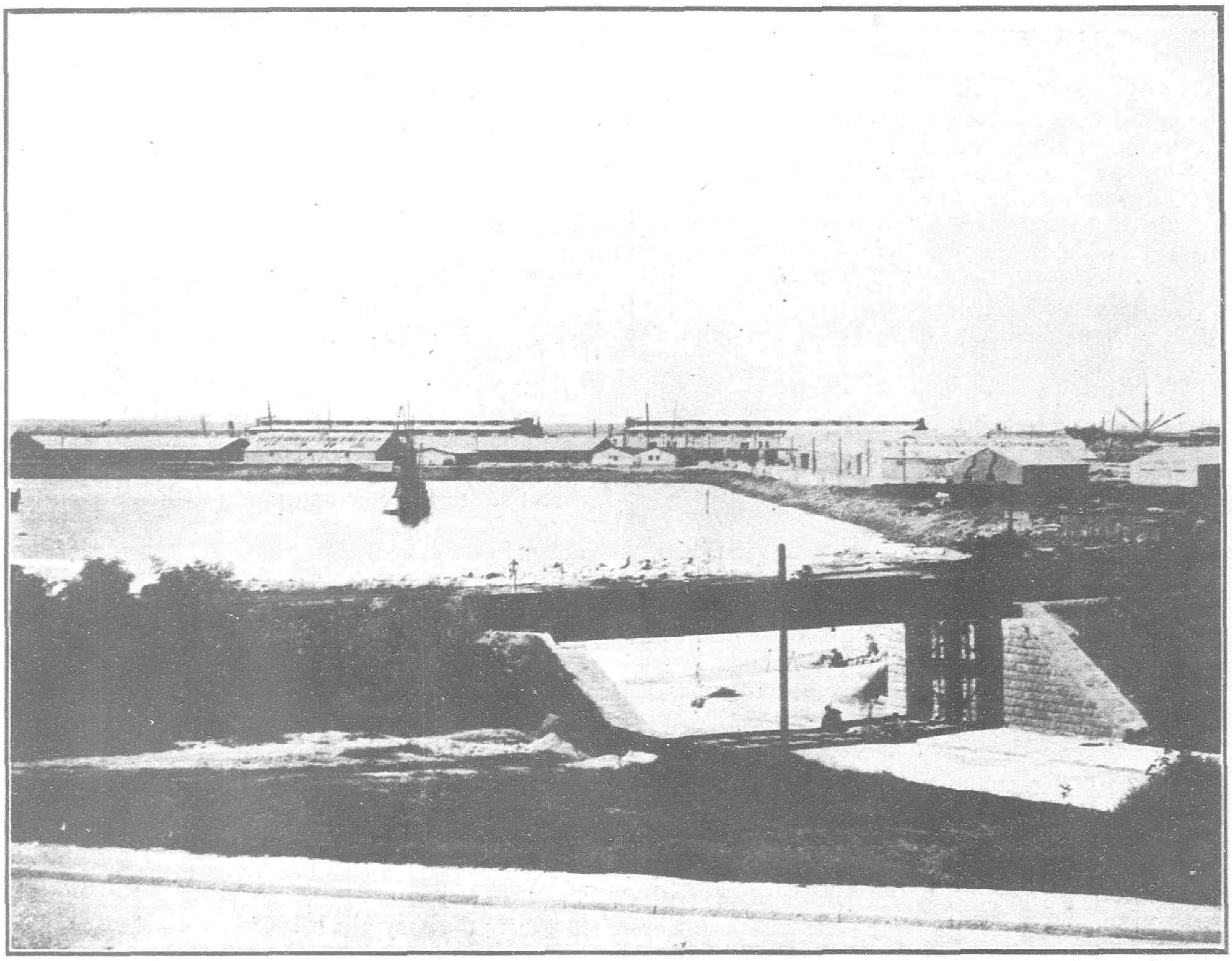
Kiaochou Bay, a natural land-locked harbour of great size has been used as a harbour for many centuries by the Chinese junks which trade round the East Coast. It was found that both for depth of water and land facilities that part of the bay on the righthand entrance from the ocean lent itself most to the building of harbour works. This decided the site of the German town of Tsingtau as well as although it necessitated a circuitous route for the railway to and from that point.

The small harbour shown on the accompanying plan is a natural haven used for fishing boats and trading junks. Nothing has been done there beyond providing roads along which goods are taken to and from the small craft frequenting the harbour. Hundreds of these picturesque vessels are always lying there, and the trade they bring to the port is considerable.

The construction of the great inner harbour shown on the accompanying plan was undertaken by the German Government in 1899. The width of the entrance is 280 m., and the minimum

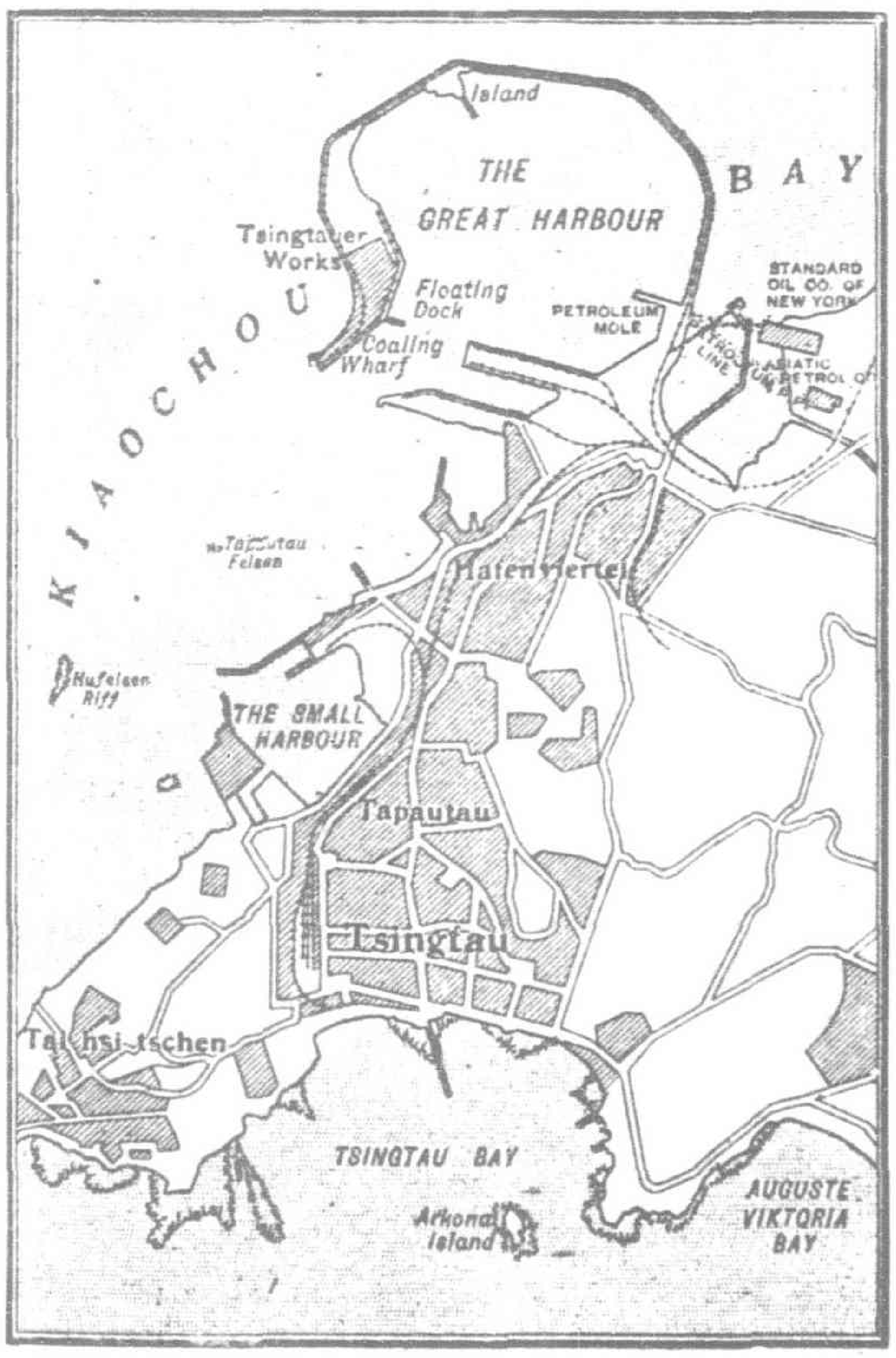


150 Ton Crane.



View of the Harbor, Tsingtau.

depth of water 10 m. On the right is the commercial harbour with three moles, two of which are 550 m. long and one 750 m. There is also an end berthing space of 100 m., making a total of 1,950 m. The mean depth of water alongside is 9.50 m. The naval harbour works are on the left of the entrance. There was a small island here, which was made up and built around so that it forms a large and convenient site for the workships and stores. The railway line is brought round to this point as well, and the bank made by the railway formation forms a breakwater which completely encloses the harbour. In making this, advantage was taken of a natural half-circle of rocks and small islands with water spaces intervening, so that it was not much more expensive than a land embankment.



Plan of Tsingtau Harbor.

The naval wharfage presents a front 1,000 m. long. Here there is a depth of 10.50 m. of water. There was a good deal of dredging done to obtain this, but once cleared it was found that little or no silting took place, so that the cost of harbour maintenance in this respect is small. The tidal rise is 2.60 m.

Fig. 2. shows the construction of the wharfage and piers. The walls rest on wooden piles driven diagonally and braced together. These are rammed between with sand filling from the solid bottom to the top to protect them from the attack of marine worms, and also to prevent rot from air and water contact. The outside piles are of ferro-concrete, standing at a slight angle.

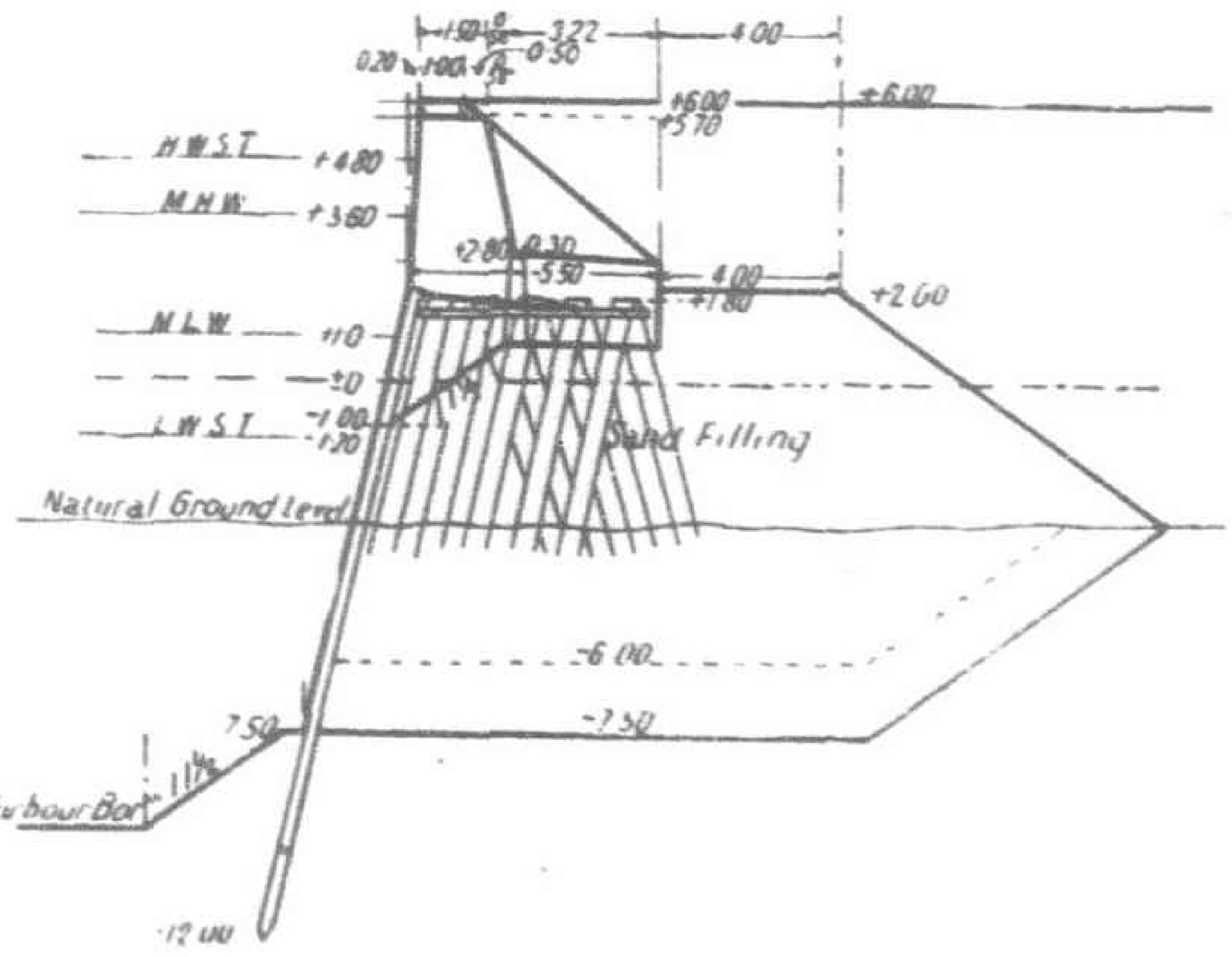
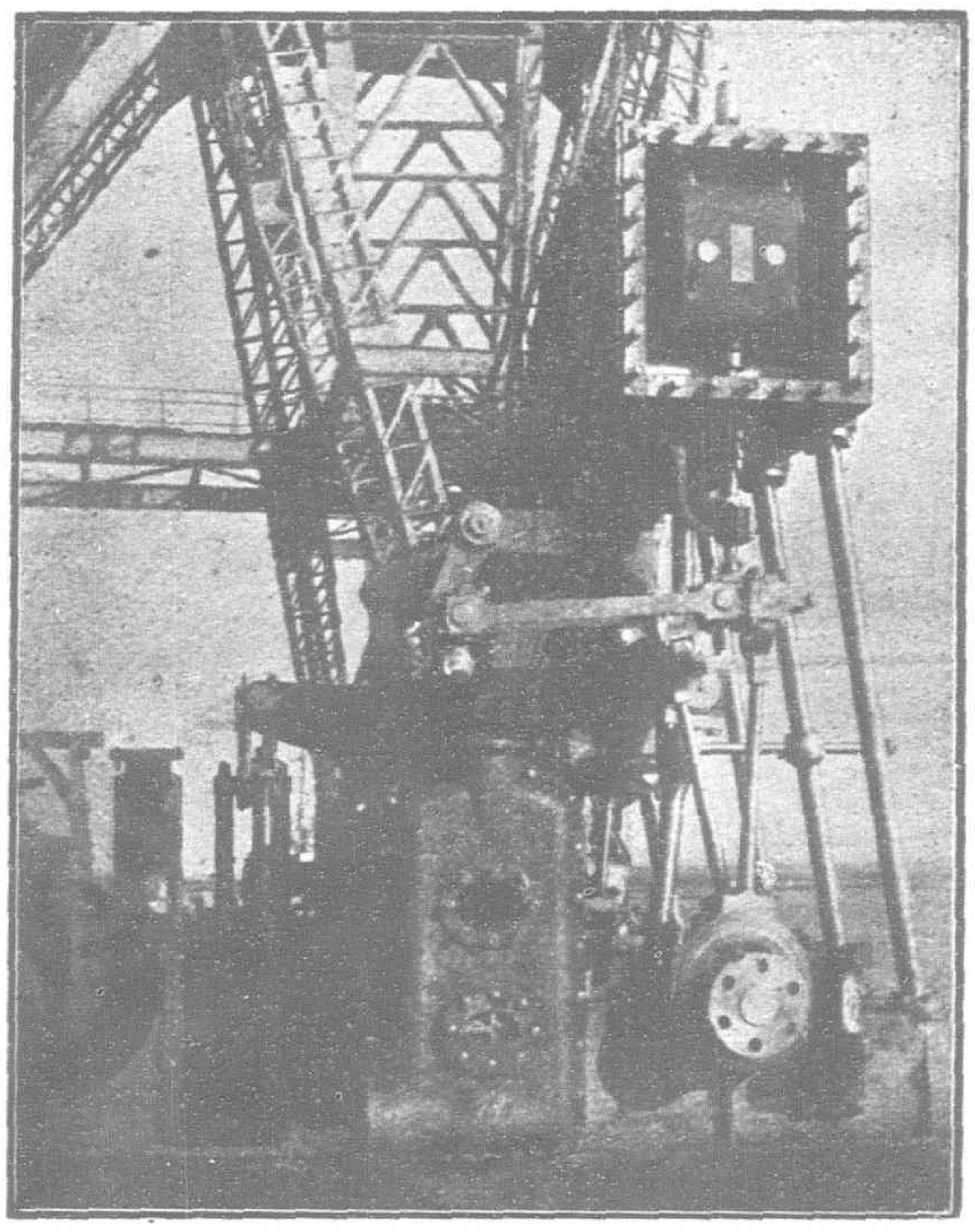


Fig. 2. Wharf Construction.

They are close together, and form a fender for the protection of the wooden piles on which the concrete and masonry structure rests.

No graving docks have been built, and none are contemplated, but there is a floating dry dock of 16,000 tons displacement, capable of extension. On the other side of the wide space occupied by workshops there are several slips on which repair work is done. At both harbours loading and unloading direct between railway trucks and vessels can be done. All the materials for the Shantung Railway, and also for the Northern Section of the Tientsin-Pukow Railway, were landed at Tsingtau.

The workshops at the naval docks are large, and equipped with the most modern appliances. They are motor-driven by electric current generated on the works, and comprise foundry, forge, fitting shop, machine shop, carpenters' shop, and everything necessary to repair or build vessels, from a trading junk to a battleship.



Marine Engines built at the Tsingtau Werft.

Tsingtau has the finest harbour in China, and these works are laid out with a view to expansion, so that nothing may be wanting to enable it to maintain its position both as a commercial port and a military and naval base.

TSINGTAU AS A SILK PORT

There are three classes of pongee exported from Shantung. The same kind of worm feeding on the same kind of leaf produces the silk for each class, and the difference in quality (i. e., color and strength) is attributed to the varying degrees of heat experienced by the worm. (There is a perceptible difference between silk produced on the north and on the south side of the same hill in Manchuria).

Honon pongee (trade name) is the best of the three classes. About 15 per cent. of the production is exported through Tsingtau, and the increased railroad facilities now afforded by the Tsingtau-Tsinanfu line will bring more by this route. Much of the remaining exports of this class goes to Shanghai, and a portion also finds its way by caraven across Mongolia to Russia.

The silk for Nanshan pongee (trade name) is cultivated within a radius of 50 miles of Chefoo. Formerly it was also woven in that district, but a large part of it, after being unreeled, is now sent to the Ch'ang-i district to be woven. There are four grades.

Shantung pongee (trade name) is manufactured from silk cultivated in Manchuria, exported from Dalny to Chefoo filatures in October, unreeled, and sent in hanks by mule to the Ch'ang-i district, where it is woven, and, formerly was returned to Chefo for export. From Ch'ang-i to Chefoo the transit time is 7 to 1 days, depending on the weather; to Tsingtau it is only 2 days—day by mule to the railroad at Ch'ang Li or Weihsien and 1 da by train to Tsingtau. There are 10 grades of this class, rangin in price from $3 to $6 gold. The output from the Ch'ang-i district is about 500,000 pieces per year.

The Chinese manufacturer sells to the agent of a Chines firm in a treaty port (Tsingtau, Chefoo, Tsientsin, or Shanghai) who in turn sells to the foreign exporter, through the comprador and a foreign expert, who passes on the grade. In Tsingtau th Chinese agents and the compradore of the foreign firm eac receive a 2 per cent commission; in Chefoo the same commission are, respectively, 1 per cent and one-half of 1 per cent; in Tientsin and Shanghai the commissions are lower because of th increased cost of transportation to these places.

Other things being equal, it is evident that Tsingtau, having direct rail communication with the center of manufacture and direct steamship communication with the principal buyers, is in possession of great advantages over neighboring ports, and these advantages have been effectively used. Since October, 1912, when the movement really began, the four largest exporters in Chefoo have transferred their business to Tsingtau. Shanghai's exporters are also represented here, and there have been new entries in the field. The most important developments have occurred since the Chinese New Year. Since that time stocks have not been replenished in Chefoo, and only 4,000 pieces were on hand there the middle of March, in contrast to 30,000 pieces in stock in Tsingtau. The silk expert of the largest exporters in Tsingtau confidently asserted that by the end of 1913 Tsingtau would be the only important market for the trade.

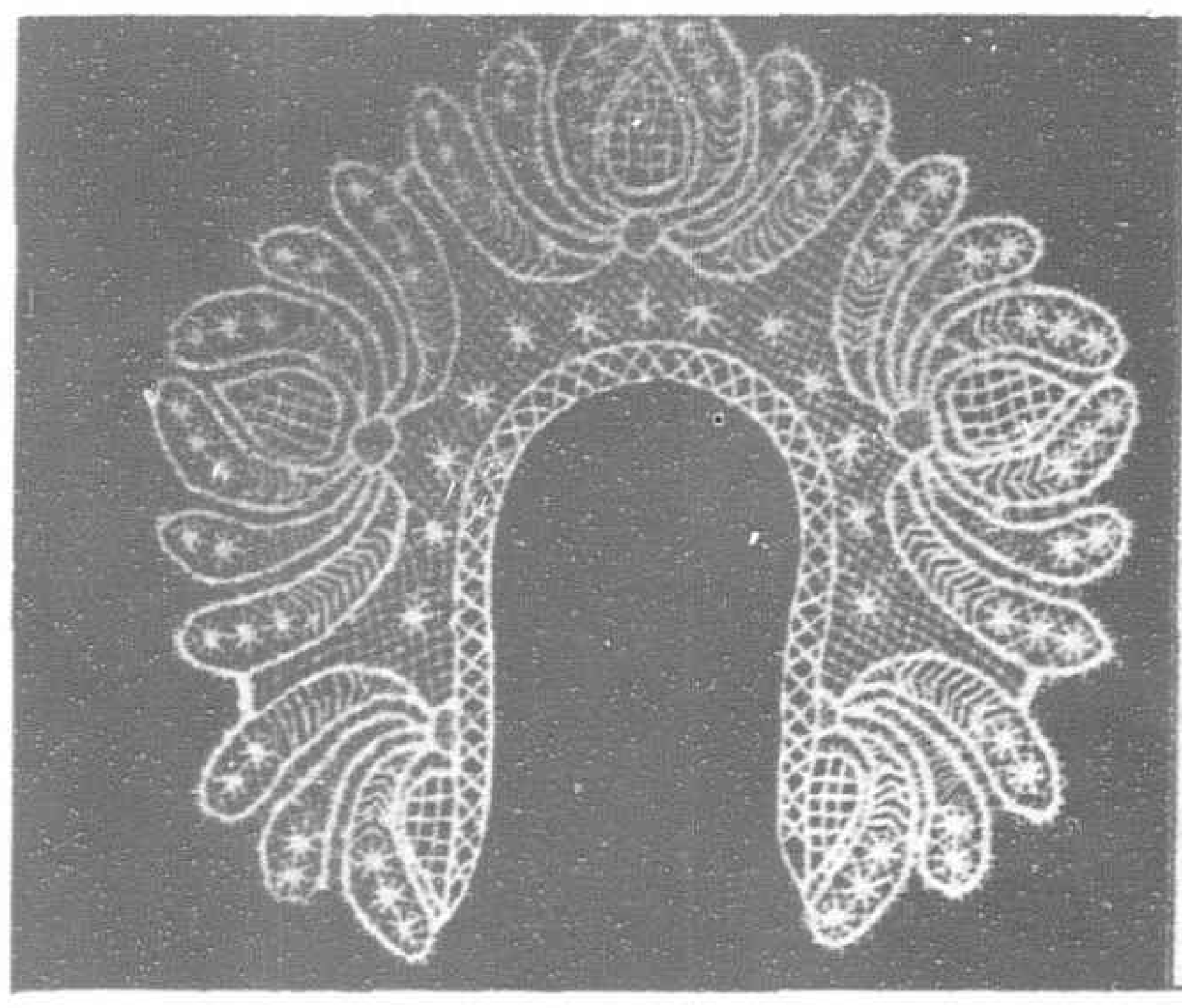
The following details of the process of the manufacture of pongee will indicate another step in the transfer of the trade to Tsingtau. The cocoons arrive in the Nanshan district in October; the chrysalis is killed by dry heat; the cocoons are stored dry for six months or longer, then softened by steam and 8 or 16 unreeled for one thread by each spindle (yield, in a good year, 1,200 to 1,400 yards from each set). The raw silk is transported in hanks by mule to the Ch'ang-i and there strung over poles and brushed with a thick gum made of beans, which makes the threads stick together; dried, and then woven on hand looms (three 20-yard pieces from each loom with two workers). The product is now heavy with gum (35 to 55 ounces per piece) and has a dark, poor color. To cleanse and improve the color 10 or 12 pieces are boiled for 3 hours in a large iron caldron together with 2 ounces of pig fat to every 30 ounces of silk. Each piece is then washed twice, usually in a stream, and flattened by rolling between wooden rollers, after which it is semidried and folded 16 times to the piece (weight, 25 to 30 ounces).

Weaving is carried on in houses which are built with three-quarters of the walls below the ground level. For this reason the business and the workers, who sleep beside their machines, suffer severely in flood seasons. The looms are of local manufacture and cost about $20 gold. A few German looms have been imported, but can not be used with success because their steel combs break the gum-coated threads. Chinese looms are fitted with bamboo teeth. It is estimated that there are 130,000 workers in the Ch'ang-i district. They earn their food, quarters, and an average wage of 4 cents gold per day. An experienced matcher of colors may receive 7 cents a day. Men under 20 years of age are employed in the filatures because their fingers are in better condition to handle the threads.

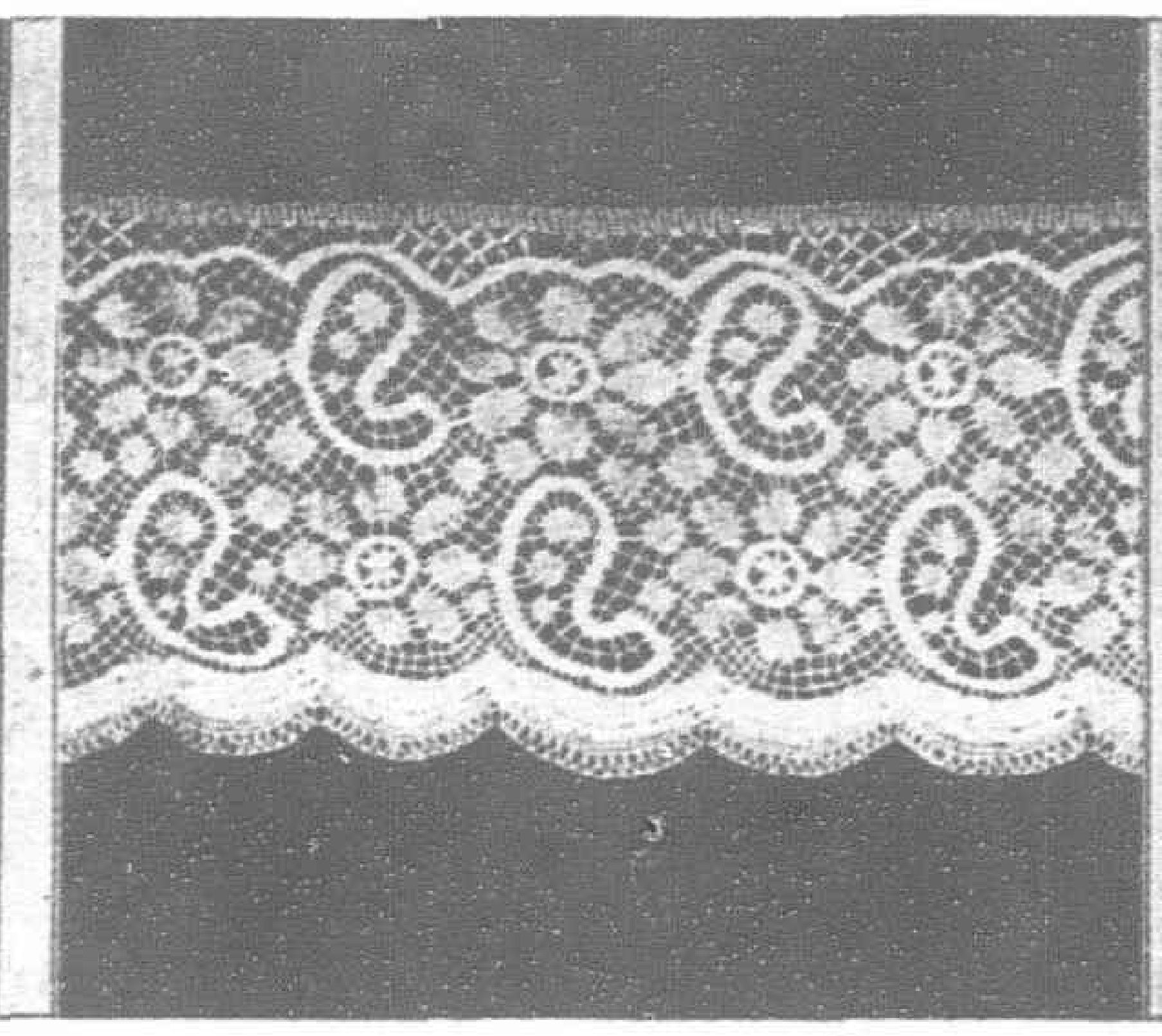
The Chinese weaver in the Ch'ang-i district formerly found a better market for his product in Chefoo; but by reason of the shorter, quicker, cleaner, and cheaper haul to the Tsingtau market, which gives him a better price there, he has recently transferred the bulk of his sales to this port in spite of the higher commissions charged there. Silk which was formerly woven nearer to Chefoo is now sent to the Ch'ang-i district to be woven in order to take advantage of the proximity of the Tsingtau market.

The raw-silk market is still controlled in Shanghai. The outside wrappings of the cocoon (waste) are also bought in Shanghai, exported to Bradford, England, made into plush, re-exported to China, and made into native coats.

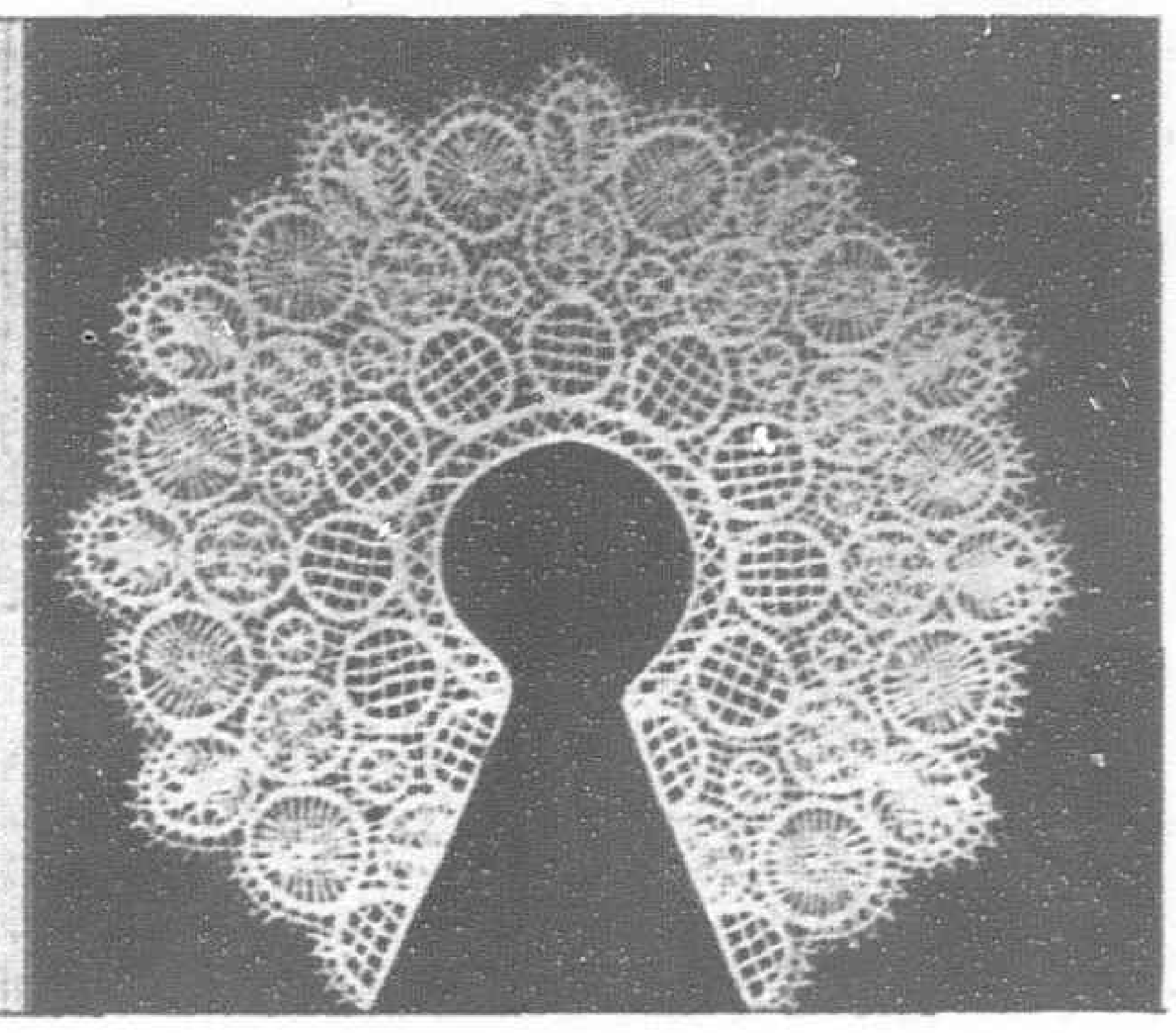
MANUFACTURE OF PONGEE SILK, HANDMADE LACES, AND DRAWN THREAD WORK



Lace Collar.



Strip of Lace.



Lace Collar.

The cultivation of silk began in China at a comparatively early period, and it is one of the oldest industries known to the country. Different kinds of silk are produced in various centers of the empire, such as Hangchow, Soochow, Szechuan, Kweichow, Honan, Shantung, and Manchuria, and all of them are of a high class, and highly favored in the markets of the commercial world, to all of which, practically, they have been introduced by the export branch of trade. In some China silks, the international trade is extremely large and prosperous, and recently the trade in the silk known as "Tussore," or "pongee," has assumed large proportions and attracted great attention in foreign countries. Large quantities of this raw silk, in hanks, are now exported to Europe and the United States of America, and it has been given a leading place among the imports of those nations, having become very popular with the ladies as material for gowns. The dress of pongee silk holds a leading position among the garments of European and American ladies, and the demand for the pongee silk is, as a result, large and steadily increasing.

For many years Chefoo has been the chief Chinese center of the pongee trade, and, although it now has a formidable rival, in Tsingtau, it still maintains its lead, and will probably continue to do so, as the best silks are produced in its immediate vicinity, and cannot be exported from any other center, unless they are transported for a considerable distance overland, or shipped, through Chefoo, to another port for delivery abroad. Two classes of pongees are handled for foreign trade at Chefoo. They are the Shantungs, the weaving center for which is Liutang, about thirty miles east of the important town of Weihsein, and the Nanshans, made in Chihsia, in the Ninghai district. Each piece of cloth is made from a particular lot of silk, and, as a result, each piece varies from every other piece in exact quality, weight, and fineness, and, to a certain extent, in color and other qualities. There are certain general grades, certain varieties of weave, certain popular weights, etc., but ladies shopping in Chinese pongees find it difficult to match pieces, and it is practically impossible to furnish any great number of pieces of a certain weight, grade, or quality.

Thirty years ago the Shantung pongee was but little known in Europe or America, though it was in great favor with foreigners resident in China. The cost price was only slightly above that of imported cotton dress goods, while it was much more durable. Its particular merit is that it can be washed without injury, losing by the process only a slight degree of its original lustre. Indeed, all pongees are washed before coming to the market, as they are made very dirty in the weaving. The length of time occupied in weaving the ordinary native standard piece, is from three to six days, according to the skill of the weaver. The inferior cloth, made in the province of Kueichow from the local wild silk is called Ko-ta-chou, on account of the lumps or nodules found in its coarse texture. A good deal is made into waterproof sheets for travelers to wrap about their bedding when it has been saturated by the oil of the varnish tree, which is a common product of the districts in which the pongee referred to is produced.

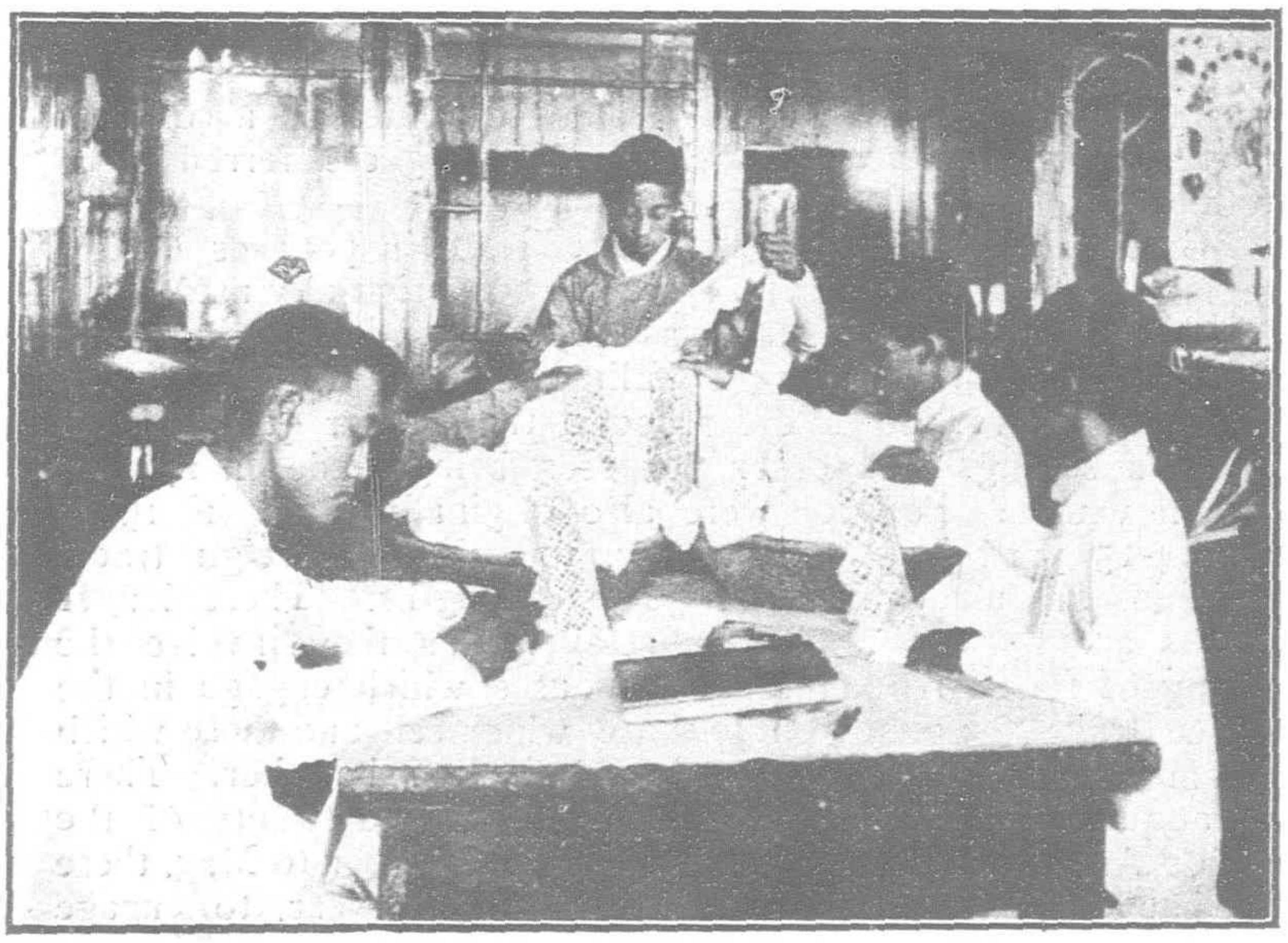
Great improvements have been effected in pongees during the last ten or fifteen years. They were originally made only in twenty-inch widths, which was later changed to 25-inch and 26-inch widths; but now the bulk of the manufacture is in 33-inch widths for ladies' dress goods, the heavier qualities, for general's suitings and other purposes, being made in 27 and 28-inch widths. Pongees were also originally made in 19-20 and 14-15 yard lengths, but now, to suit the foreign trade, quantities are made in 30 or 50-yard lengths. These longer lengths are more suitable for retailers, as they involve the leaving of fewer remnants. The houses which engage in the pongee trade are divided into those which sell and those which buy, and neither encroaches on the province of the other. There are at present about forty of the former, and twenty of the latter. As the season only lasts from November to May, these merchants are obliged during the rest of the year, to engage in other business, such as dyeing, general trade, or dealing in "mountain produce." At the head of the firm is the manager, in whom sole responsibility is vested, and under him are his assistants, divided into outdoor and indoor workers. The former are again divided into silver men and thread men, the first to cope with the intricacies of exchange dealings in transfer money, keeping in touch with the money market, the latter to collect thread for customers, to introduce buyers and sellers, and to be acquainted with the daily fluctuations of prices. The selling shops, having laid in their stocks of silk, send samples to the buying houses whose outdoor man then proceeds to the selling house to negotiate bargains. Commissions on sales are fixed at two per cent., but this figure it is said, is often exceeded.

One of the largest dealers in pongees in Chefoo, is the Messrs. James McMullan & Company, Ltd., who have been engaged in the business for a number of years, and have done much to popularize pongees in foreign countries, spending large amounts annually in advertising and in distributing samples. The fact that this firm handles so large a quantity of pongees, makes it necessary for them to employ the most expert examiners. As pongee is made on hand looms, every piece differing slightly from every other piece, it can be properly graded only by these possessing experience and expert knowledge, and who handle large quantities, as frequently one lot may have to be divided into several distinct classes. The firm also maintains spacious drying grounds, and other conveniences required for carrying into execution its important work.

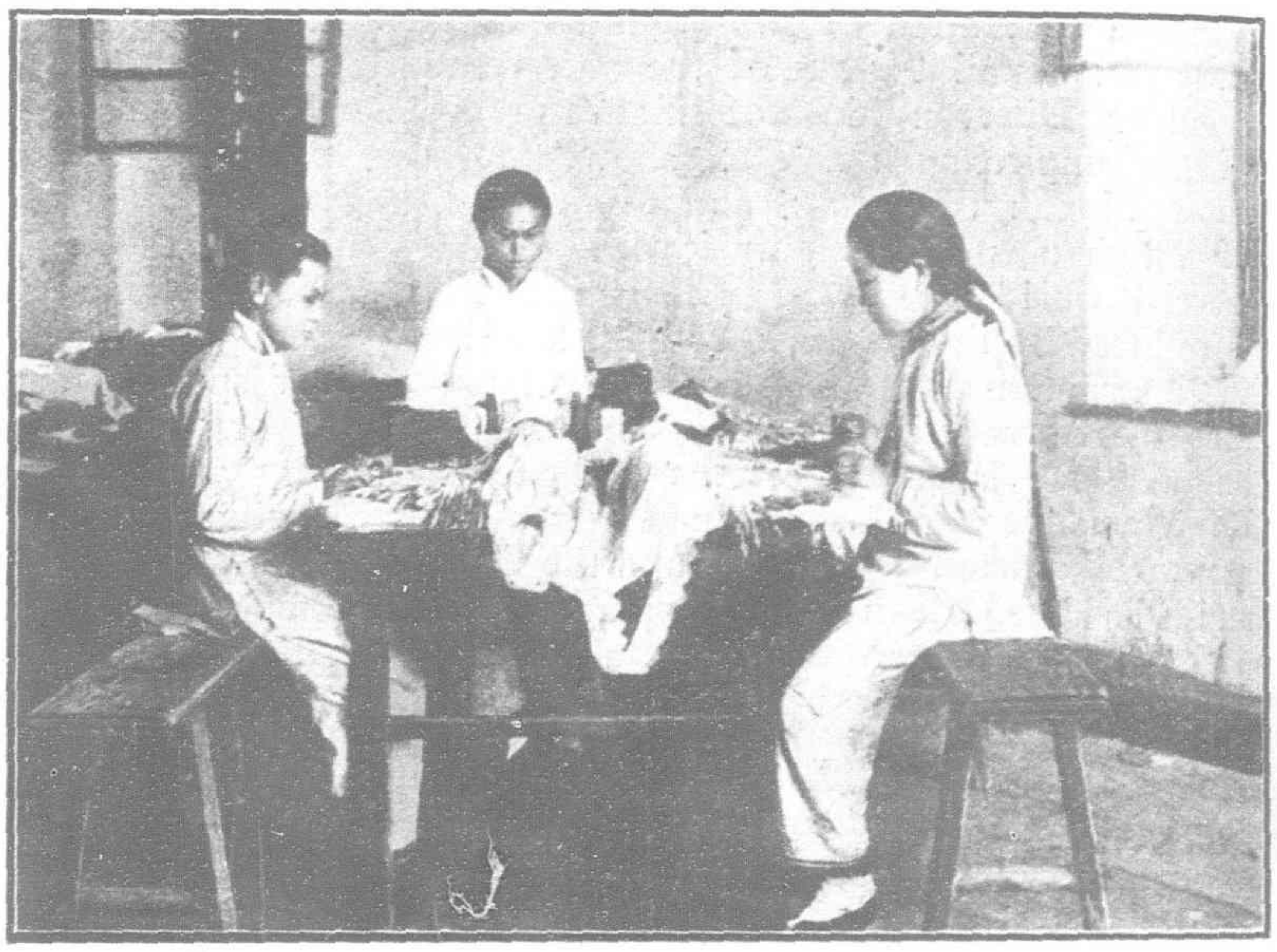
The vogue of silk and the uses to which it may be put have greatly increased in recent years, and as a result every silk-producing country is striving to increase its production, and fresh sources of supply are heartily welcomed. In the special lines on which Tussore or pongee silk is employed, plush and pile fabrics made from the waste, it fairly rivals the best silk, and is far cheaper than any other class. It is deservedly popular for purposes requiring a fabric at once light, close, and resisting, as in the automobile dress industry. The Shantung pongees have become fashionable and woven Tussore is used in many ways. Its peculiar lustre and strength render it very suitable for embroidery. Fears were once entertained in Italy that pongees would interfere with the production of classical silk, but the former cannot hope to rival the latter, on account of the greater "hairiness" and thickness of its thread, and its inferior elasticity and gloss. Its true position is rather that of an ally, opposing the invasion of the markets of the world by artificial silk, which costs more than Tussore, and, with its characteristic splendor removed has not the intrinsic qualities of the wild silk. To another competitor, spun silk, Tussore opposes superior lustre.

The tendency recently for the manufacture of silk thread shown in Manchuria, is regarded as evidence that Chefoo, which is now the acknowledged seat of the pongee industry of China, with all the advantages of scientific methods and expert workers, may soon begin to feel the stress of genuine competition. An attempt has been made to establish a filature at Dairen, but, although silk of good quality was produced, the lack of a sufficient supply of skilled labor, caused a stoppage of the work, which it is said, however, may be only temporary. In any case the cost of transportation to Chefoo, will, as the quality of Manchurian-made silk improves, tend to tell in favor of the product made nearer to the producing districts. The improvement of quality is becoming increasingly necessary, in view of the bad reputation which "native raws" have achieved in the West. The Chinese occupation of Manchuria is said to be doing something toward encouraging the new industry, while the Japanese authorities have also conducted experiments with the same object in view. In the British-leased territory of Wei-hai-wei there is also a good opening for the development of the pongee industry, as land which can be used for no other purpose is available for oak culture. Silk produced by the variety of worm fed on the Cudrania, commands a better price, but experts declare that the Tussore silk could be cultivated with success.

Chefoo hand-made lace is a comparatively new industry in China, having been begun in 1894, by a lady connected with the American Presbyterian Mission. She had no idea of founding an industry which would become a source of wealth to investors, her only object being to introduce her scholars to a new art, which would prove of benefit to them as an occupation for their leisure hours, and as producing useful and at the same time ornamental articles for the household use. The missionary laid the foundation for the establishment of a profitable industry in China, although she can scarcely be said to have established it herself. She returned to America soon after having initiated her pupils into the art of lace-making, but the next year, 1895, Mrs. James McMullan founded the Industrial Mission School at Chefoo. It required careful handling, much time and the expenditure of much money to start and maintain this school, which devoted its time to the making of hand-made lace, but the idea, once implanted in the public mind, developed rapidly. Scholars leaving the school taught lace-making to their friends, and the outfit required for the work being simple, easily made, and not expensive, the workers devoting themselves to the industry soon became numerous, and the industry began to prosper. The outfit consists of a simple pillow, or padded board, bobbins, pins, etc., occupies but a small space, and lace-making became recognized as particularly well suited for a cottage industry. At present many thousands of women and girls are engaged in making lace in the Chefoo district, and the market for their products is a large one and steadily increasing with the progress of the years.



Measuring Lace.



Lace Making.

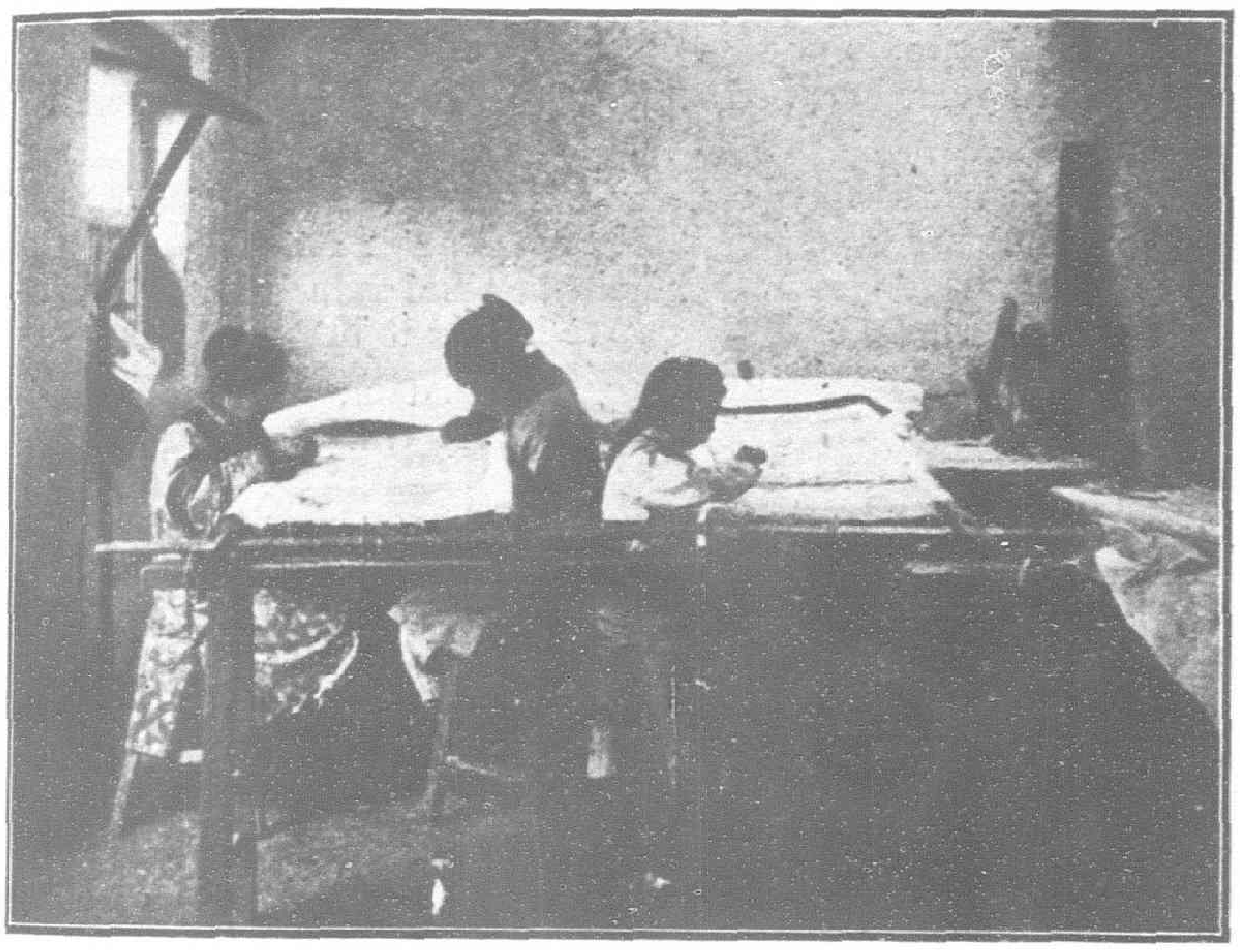
The object proclaimed by the Industrial Mission Schools is to give the girls who attend it a knowledge of the Gospel, a useful education, and enable them to earn something by lace-making to enable them to help pay for their education; also to place them in a position, if necessary, to aid them in earning their own living after leaving the school. Rented premises were occupied by the school until 1902, when Mr. McMullan purchased land near Chefoo, and built a structure which has been the headquarters of the interesting work since. The pupils are apparently very happy in their study and work. If industrious and expert, they can, in the time allowed for work, earn more than enough to pay for their support. Though the schools are of a pronounced missionary character, no appeals are made for funds to aid in their support, the cost of their maintenance being paid by the firm of James McMullan & Company.

Originally the lace was made in cream and white silk thread, produced in Shantung, and quantities are still made in this thread. But during recent years by far the larger quantities are made from imported linen and cotton threads. James McMullan & Company have taken considerable trouble to procure the threads best suited for making the laces, and they now import large quantities of linen and cotton threads from Great Britain, which are specially manufactured for them, and from which the best laces are made. The workers find that they can secure a much better price for the laces made from these high class threads, and have therefore almost entirely stopped purchasing the cheaper threads of various shades.

This insures uniformity of color and quantity in the laces made. The best of them are made by scholars trained in the industrial schools. Unfortunately, however, large numbers of workers have begun lace-making without proper training, and as a result, quantities of inferior laces are produced. The careful inspection of the work has become paramount on this account and James McMullan & Company employ several expert examiners at Chefoo, and have now established another receiving center at the German port of Tsingtau.

The excellencies of the laces made at Chefoo are proved by the fact that they were awarded gold medals at the St. Louis Exposition, U. S. A., in 1904, and a diploma of merit in the Australian Exhibition of Women's Work, at Melbourne, in 1907, which are the only two places where the company has exhibited them as contestants for prizes. The demand for the Chefoo laces is now very considerable the world over, and absorbs all that are made of first-class quality. A great variety of patterns of laces are now manufactured, as also lace collarettes, cuffs, ties, mantillas, scarfs, doilies, lace coats and dresses. Some of the lace patterns made are shown in the accompanying illustrations.

A few years after the introduction of the lace industry to Chefoo, the drawn-thread and embroidery industry was established in the district. In the beginning the drawn-thread work was done exclusively on pongee silk, but of late years Chinese grass cloth and Irish linen have been largely used in the industry. The linen is imported by James McMullan & Company directly from Belfast, Ireland, and is the finest that money can purchase. Many beautiful articles are manufactured to adorn the home or add to its facilities for comfort, such as table-centers, luncheon sets, tray cloths, piano and sideboard covers, cushion covers, bed-spreads, and window curtains. The drawn thread work, though a great industry in Chefoo, has not spread itself into the country to such an extent as the lace-making industry. Most of the work is done in factories in Chefoo, so that if goods are ordered that are temporarily out of stock, they can be made promptly to fill all requirements. In silk lace and drawn thread work, the differences in workmanship and materials used are so great that opportunities are afforded to suppliers to substitute inferior goods to those ordered, and it is a result exceedingly important to firms engaged in these industries to place their orders with thoroughly reliable houses.

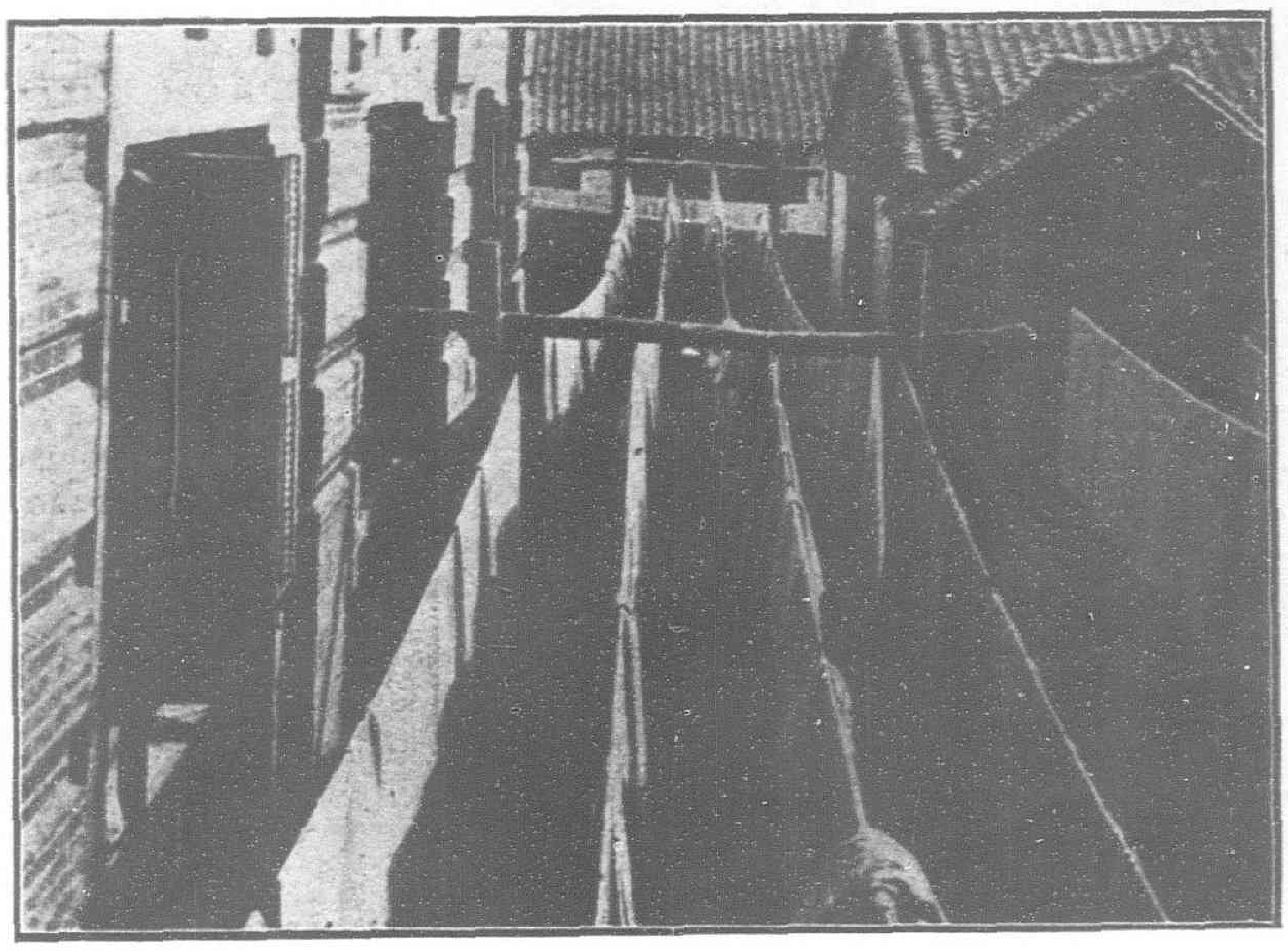


Drawn Thread and Embroidery Working.

In the export branch of these Chefoo industries, the demand for the products is extremely large at all times, and is steadily increasing in volume year after year. The great reduction made in the duty on pongee silk entering the United States of America, by the enactment of the Underwood tariff law, has removed a serious handicap against the growth of consumption in the United States, though that consumption has always been very large. The duty is now only 45 per cent. ad valorem, and as pongee silks are now lower in value in the home market than they have been for many years, they can be sold, even with the duty added, at a very moderate price. A great increase in the volume of the export trade of China with the United States is considered certain under the favorable conditions now prevailing.

The experience of James McMullan & Company, in the course of its business career at Chefoo, is an object lesson for foreigners contemplating the establishment of a business in China. Like every other successful foreign house in the Chinese Empire, this firm has had to meet with bitter competition from the native business houses, competition which it has been difficult to struggle against successfully, and made harder still by the natural opposition caused by race differences. It has succeeded in its struggle to establish a profitable business, purely by the exercise of keen tact and unbending energy.

In rearing the silk worm the early stages are somewhat differently managed in the case of the autumn crop, when the weather is warm. The males and females are then tied together with hemp thread or with the silk worm grass, seven or eight inches apart, and after separation the females are conveyed in baskets to the hillsides, where they are tied to the branches of the oak trees until they have deposited their eggs, so that the infant worms, hatching out in their natural habitat, are enabled to begin feeding without delay. The moths are fed to the poultry, the males being occasionally eaten by the peasants themselves, but the females are considered unfit for human consumption. When the eggs hatch indoors, the infant worms are not taken out to the oak plantation until after their first mute, and are treated in either of two ways, according to convenience. One of these methods is called Han Tun, or dry mound, in which the worms feed on young branches of oak, two or three feet long, tied in a bundle, and placed in vessels containing water. The other method is called Shui Chang, or "water yard," and the worms feed upon branches similarly cut and placed in the mud or sand on the banks of a mountain stream. In both methods care must be taken that the place is well sheltered, and not too much exposed to the winds. In Japan the eggs, which have been kept in a box, are, about ten days before hatching, pasted with starch made from the roots of a fern named warabi, upon eggs cards, each of which bears about sixty eggs. These cards are securely fastened to the trees, and the paste prevents the eggs from being washed off by rain. Sometimes a wooden plate takes the place of the cards. About one million eggs are allowed to one acre in Japan.



Drying Pongee Silk.

In indoor rearing, much care must be taken to keep the water in the tubs, in which the cut branches rest, always fresh and clean. These receptacles must be stoppered, or the worms, which are fond of water, will descend into them and be drowned. Close attention has been paid to the subject of rearing indoors by breeders in Europe, where considerable success has attended their efforts, and minute directions are given as to the precautions to be observed. In China, however, it is a recognized fact that the worms should be taken outside, to feed in the open as soon as possible, because in their natural surroundings they are less exposed to danger from the attacks of disease than those reared in Europe. When carried in the baskets the worms should not be allowed to come in contact with each other.

The plantations on which the worms are reared should be divided into three parts, and two-thirds of the area reserved for the last stage of the worm life, during which they are most voracious. The number of seed cocoons necessary for a flourishing plantation is variously stated as ranging from four to six thousand, and from these, counting one hundred eggs as the average laid by each female moth, two or three thousand worms will be produced. By no means will all of these worms reach maturity however. In good years 150,000 is considered a bumper crop, while an average is 100,000, and in poor years the farmer is lucky if he gets 50,000 cocoons. The autumn crop yields nearly double that of the spring, because climatic conditions are better. The plantations should be on sloping ground, facing southeast. No trees should be planted near a dusty road, or in damp, low-lying situations. If the wood is too luxuriant, it should be thinned out, and paths should be constructed through the plantation, so that ready access may be had to the worms. Lights should be kept burning at night to attract noxious insects, and burn them in the flame. In China women are not allowed on the silk plantations, as their presence is supposed to be pernicious to the worms, which are said to entertain a strong dislike for the weaker sex. The same rule is observed in the Indian wild silk plantations. The varnish tree also should be destroyed, as its emanations are fatal to the worms. The danger from this tree, however, only exists in Shantung. The plantations should be swept and garnished in early spring and nests or eggs of other insects removed, when found, together with any substance likely to prove unsanitary.

Pongee silk is a prime favorite with ladies of the United States for the manufacture of garments. As a result, the exportation of pongees to America is a large and prosperous business, absorbing the energies of many Chinese houses.

COTTON IN SHANTUNG

Up to the year 1910 cotton produced in Shantung attracted very little attention. But, since then, as the amount of its exportation to Shanghai through Tsingtau increased, foreign as well as native merchants of that port began to look upon it as possessing a certain degree of importance.

The province experienced especially good harvests during the last few years, and an immense quantity of cotton was shipped from Tsingtau to Shanghai, with the result that it has become an important article of trade as well worth investigation as beans. Although the exact amount of cotton exported through the Port is unknown, if the investigations made by German Consul as well as Chinese merchants are put together, Shantung cotton shipped out through Tsingtau during 1910 and at the beginning of 1911 seems to have been as follows:

January, February and March	1,445	piculs
April, May and June	3,356	,,
July, August and September	248	,,
October, November and December	10,503	,,
January, February and March 1911	15,886	,,
April and May,	5,094	,,

For many years, cotton growers of Shantung imported American seed and tried to improve the quality of native cotton. In consequence of that, there are two kinds of cotton now produced in the province,—native and American. But it has been proven that American cotton transplanted in Shantung will gradually lose its original quality, until by the third year it is completely degenerated. Again, cotton raised from American seed is longer in staple and better in appearance than the native product, but there is practically no difference in price between the two.

The best Shantung cotton is produced in the district around Lintsing, especially in Tungchang Fu, as the result of years of effort to improve the product by importing the seed from America. It is true that there are several places in Shantung and Chihli, where cotton as good as the Lintsing product is raised, but there is no district, from the entire area of which a good variety of cotton is produced in such abundance as at Lintsing.

The special feature of Shantung cotton is that it is quite free of moisture, owing to the extreme dryness of the climate. Humidity contained in it is very much less than that which is found in cotton raised in the Yangtsze Valley.

In an ordinary year, the crop of Shantung cotton is estimated at about 200,000 piculs. The greater part of it is consumed in the eastern and southern parts of the Province where cotton is scarce, and the balance is shipped abroad after being pressed at Tsingtau. Export to Tientsin is increasing from year to year, but the bulk of cotton for foreign shipment is sent to Tsingtau via Tsinan.

Other districts where cotton is produced in large quantities in Shantung are Kaotang and Hsiatsin. According to the investigation made last year the amount and value of cotton produced in the two places during 1912 is said to be as follows:

	Kaotang.	Hsiatsin.	Total.
Area	8,000 ching	7,000 ching	15,000 ching
Amount of annual production	32,000 pcls.	30,000 pcls.	62,000 pcls.
Value	$3,200,000	$2,900,000	$6,100,000

Out of this amount not more than 40 per cent. is consumed in the province and the balance is exported abroad.

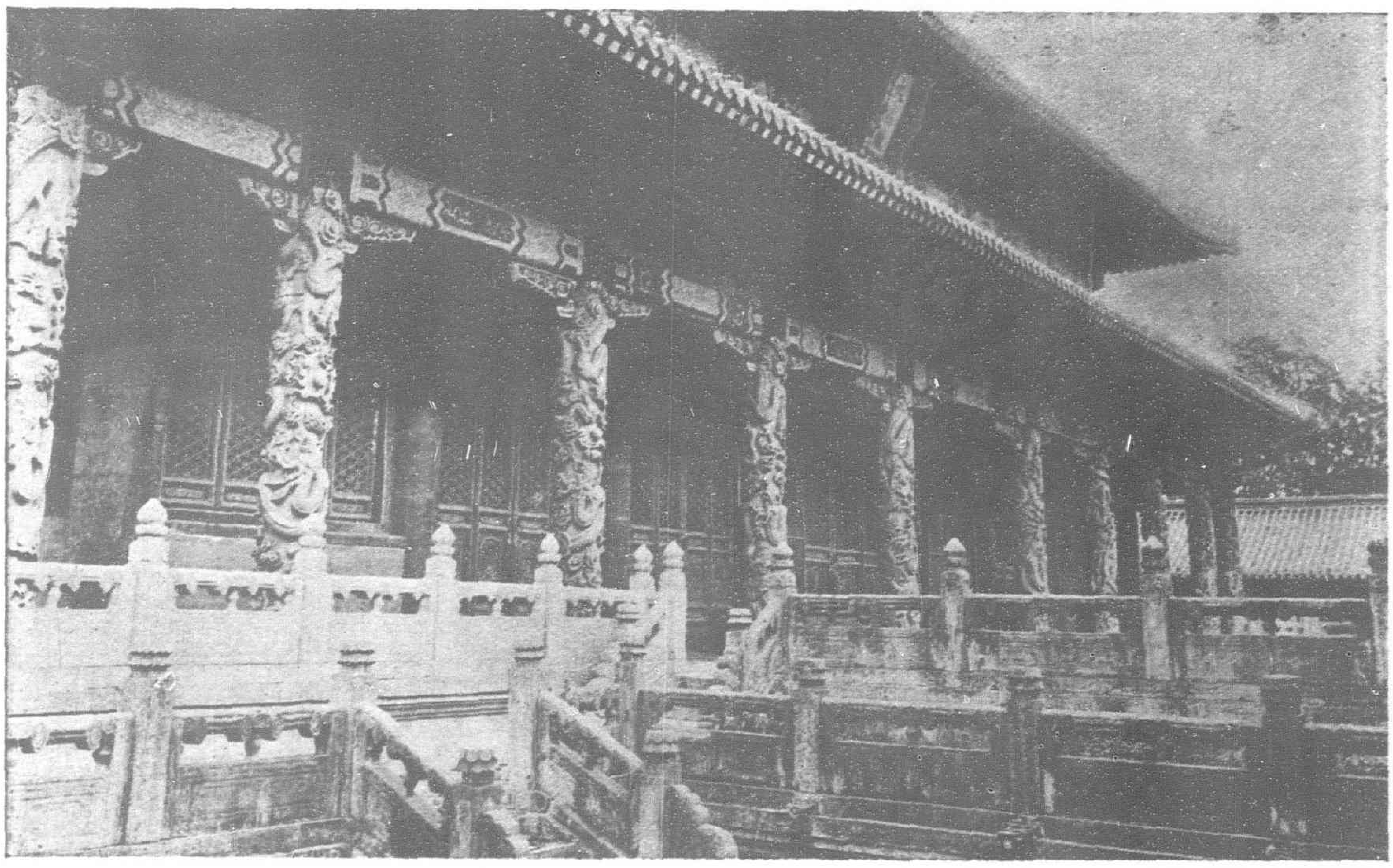
Shantung cotton marketed at Tientsin amounts to about 40 per cent. of the entire product in Shantung. This is partly shipped to Tientsin and Tsingtau, and partly consumed by local people. Cotton transactions are invariably carried on through the native wholesale dealers. They have very close connection with brokers and cotton growers, and as the result of the established customs of many years their influence is unsurmountably strong. As it is, all the attempts of foreign firms at Tsingtau to purchase cotton directly from native growers without asking the assistance of the wholesale merchants and brokers have so far achieved no success. Recently three or four foreign merchants at Tsingtau combined and are trying to buy cotton directly from growers, but success seems to be far ahead in the future.

Ginned cotton is generally packed in bales each weighing 55-85 catties including the tare, the weight of the latter being estimated at 3½ per cent. The contract price of foreign merchants during the year 1912 was Tls 21-22 per 100 catties laid down at Tsinan.

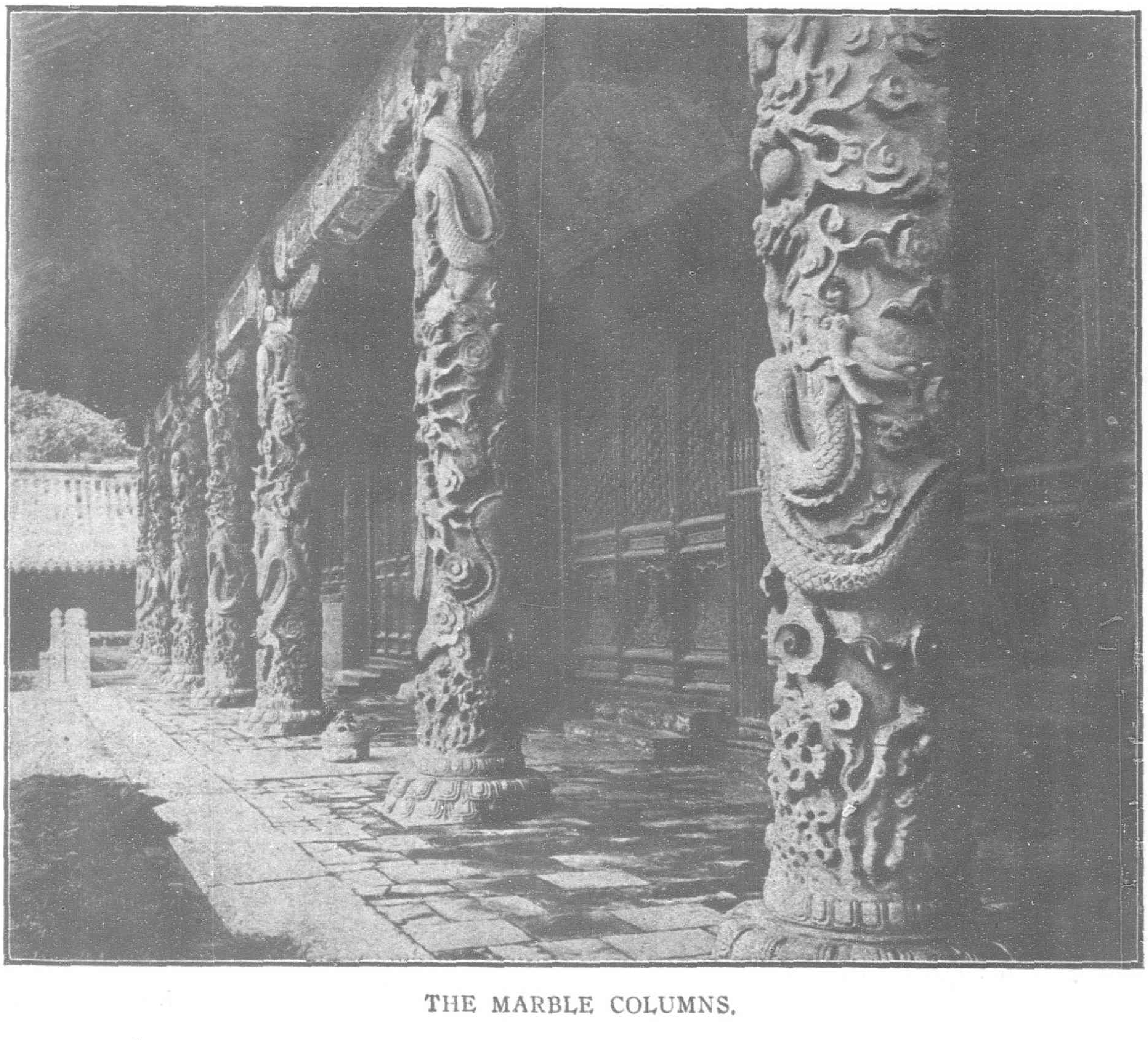
About seventy-five silver cents per bale are required as the expenses for transportation from Tsinan to Tsingtau including the charges of loading in the steamer. The difference between the prices of cotton growers and a wholesale merchant at Tsinan is 7—10 per cent. of the current price. Out of this, about 2 per cent. constitutes the freight from the place of production to Tsinan. The farther away the place of production from Tsinan, the higher the freight, but the price of cotton at Tsinan is not affected by it, as it can be bought cheaper as the distance becomes greater. The balance of 5 or 7 per cent. makes up the commission of (1) small brokers, who go around the country and buy cotton from growers, (2) larger brokers who purchase what the former collected, and (3) large wholesale dealers at Tsinan.

Only a small portion of Shantung cotton exported from Tsingtau is shipped to Japan, the bulk being sent to Shanghai, where it is consumed at spinning mills. The freight from

THE TEMPLE OF CONFUCIUS



FACADE OF THE TEMPLE OF CONFUCIUS.



THE MARBLE COLUMNS.

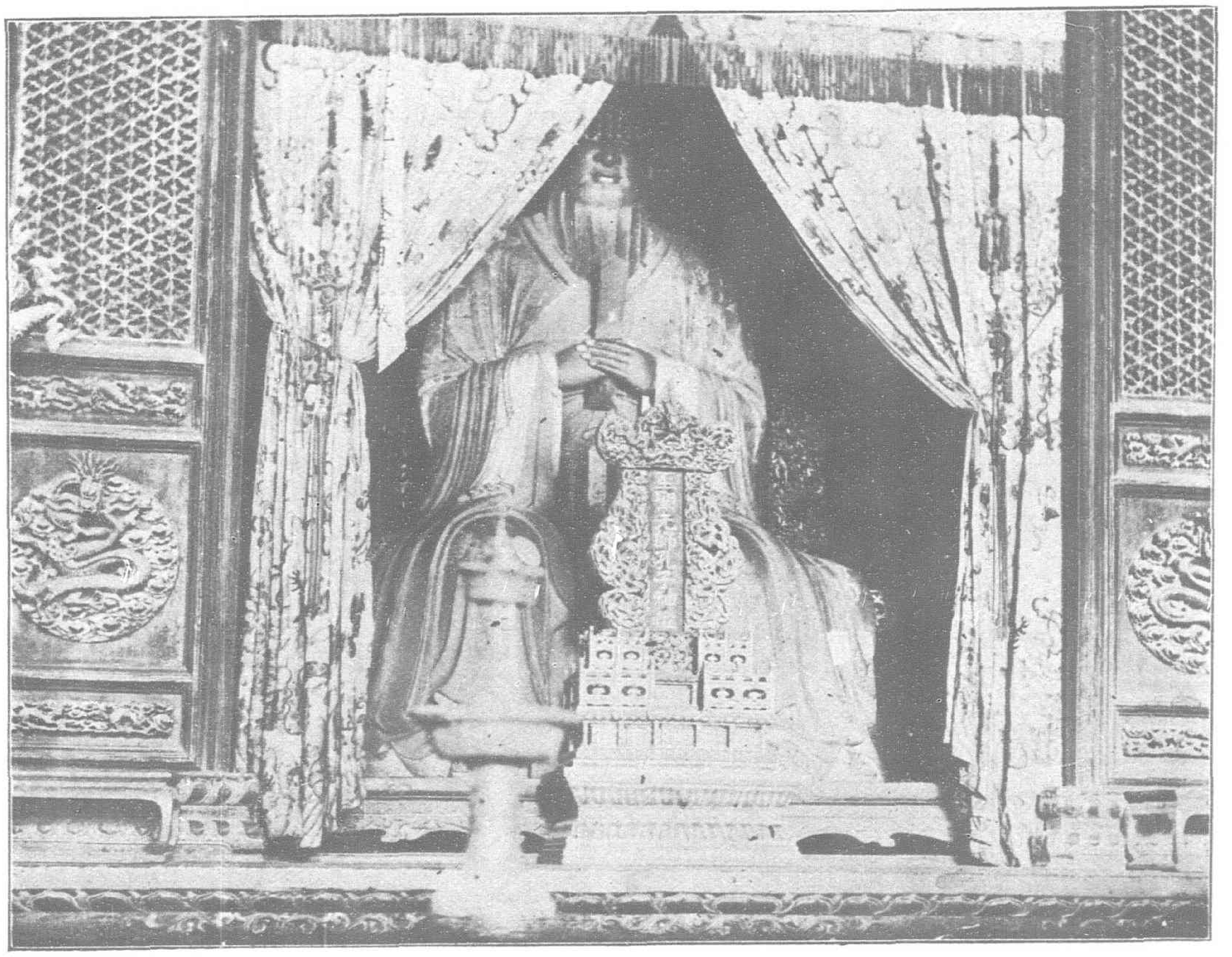


Image of Confucius in the Temple at Chufu.

Tsingtau to Shanghai is one Mexican dollar per 100 Kilogramme. No shipment has yet been made to Europe from that Port, but from Tientsin, Shantung cotton, especially Lintsing product, has been exported in large quantities to Great Britain and Germany lately.

Tientsin merchants buy cotton much cheaper than foreign buyers at Tsinan. This is because the former have larger capital, greater experience and are more painstaking in the method of buying than Tsinan merchants. For instance, they despatch their agents to the country during the summer, and after looking at the plants, contract for the purchase, paying down certain sums of money as deposit to cotton growers. Although this method is attended to with more or less risks, purchase can be made very much cheaper than those who will buy through the hands of commission merchants and wholesale dealers after the crop is reaped.

At various cotton producing districts in Shantung, cotton gin machines of Japanese make are generally used. These cost only about $40 apiece, but they are not only very easily damaged. They do not, however, completely take away the seed. The Industrial Bureau of Tsinan is manufacturing ginning machinery in imitation of the Japanese machine, and supplying it extensively to cotton growers in the interior. On the other hand a German-made machine costs only 3-400 marks, but its efficiency and the amount of work it accomplishes are far above the Japanese machines.

GOVERNMENT ENCOURAGEMENT

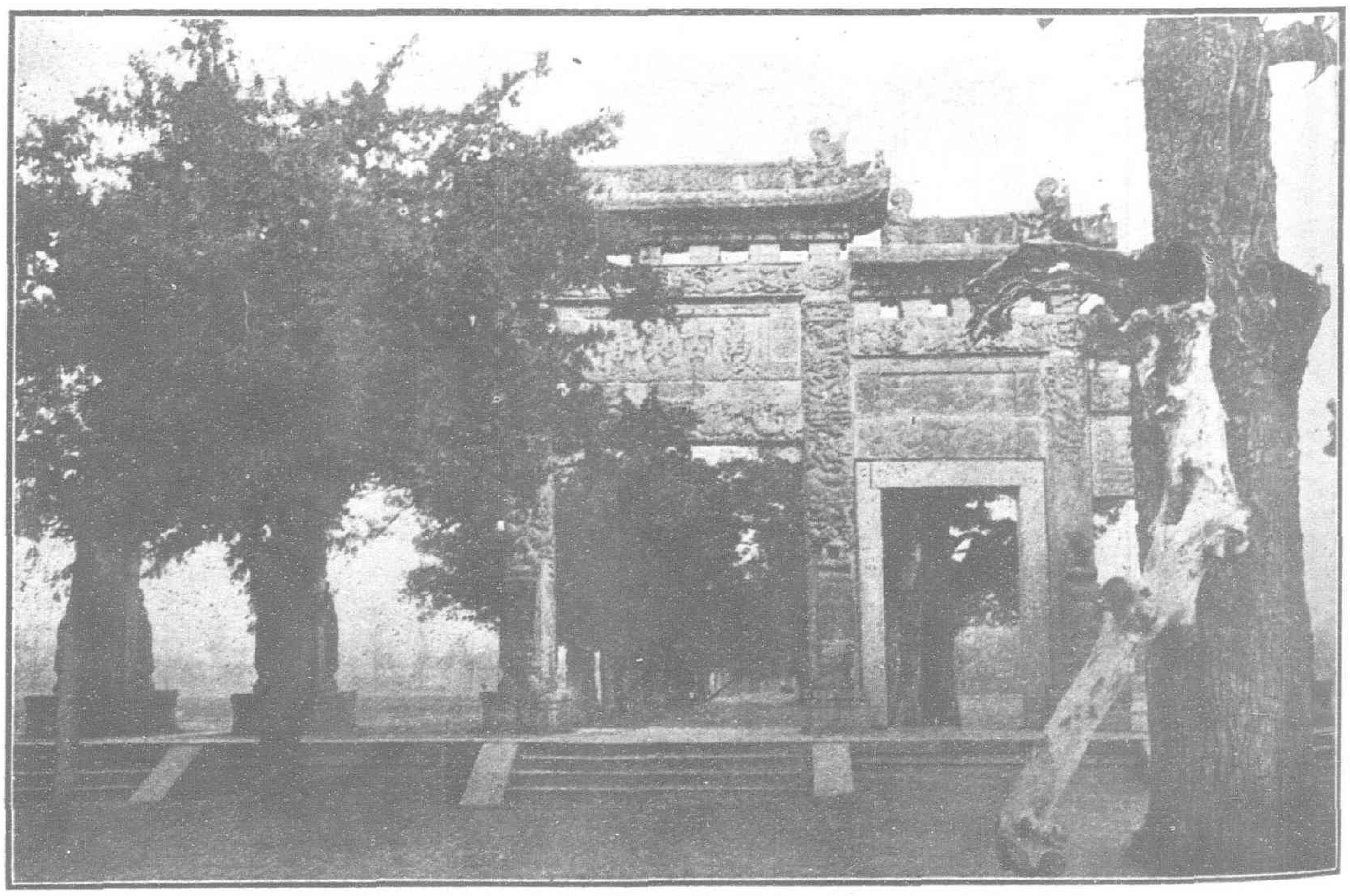
Mr. Fan Fu, Commissioner of Industry, Shantung, has been working hard for the improvement and development of the industry in the province. As soon as he took up the post, he published his policy for the industrial administration to

interest, historically speaking. These are the Grave of Confucius and the Sacred Mountain Tai Shan. Confucius was buried in the year 478 B.C., at his birthplace at K'ufu near Yenchowfu. There lives at K'ufu to-day the seventy-fifth lineal descendant of Confucius, on a large estate belonging to the descendants of the family of Confucius. The grave of Confucius with those of his descendants of 74 generations makes one of the most picturesque and one of the most unique spots in all of China.

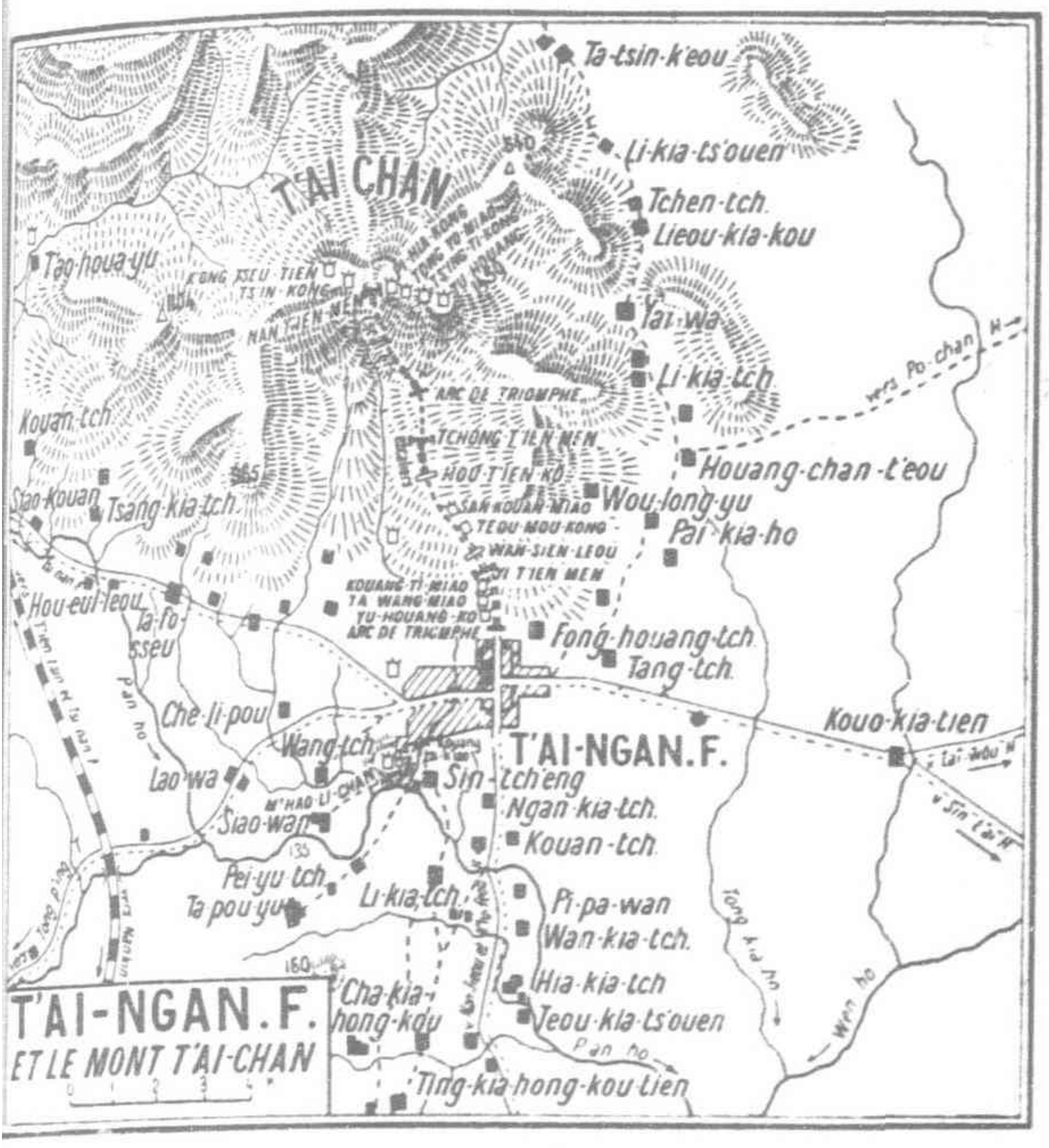
This family cemetery is encompassed in a wall, 8 to 10 miles in circumference. The interior makes one vast grove, trees having been planted there since the burial of Confucius 25 centuries ago. Within a mile from the entrance to the Confucian cemetery is the Confucian Temple, a set of beautiful Chinese temple buildings, with yellow glazed tile roofs amidst a grove of ancient cedars. Here we find also the ancestral hall of the descendants of Confucius. In close proximity to the Confucius Temple is the home of the only surviving descendant of Confucius. The gentleman, Duke Kung, lives here in a little principality of his own. He receives callers. The Grave of Confucius, the Confucian Temple, and the residence of the seventy-fifth lineal descendant of Confucius together make one of the most interesting show places of China. These are within easy reach of the Tientsin-Pukow Railway, being but 6 or 7 miles from Yenchowfu, the halfway station on the railway between Tientsin and Pukow. Visitors may reach Yenchowfu from Tsingtau over the German railway to Tsinanfu, where they may connect with the Tientsin-Pukow line, or from Tientsin or Pukow, opposite Nanking on the Yangtze River.

The governor of Shantung is contemplating the construction of an automobile road from Yenchowfu to K'ufu and the operation of a sight-seeing automobile over this road during the spring and autumn seasons when tourists are most likely to visit this interesting spot. Tourists will find the spring or autumn months the most favorable for visits to Confucius's grave.

Another spot of great historical interest in Shantung is the



Marble Memorial Arch in Avenue leading to Temple of Confucius.



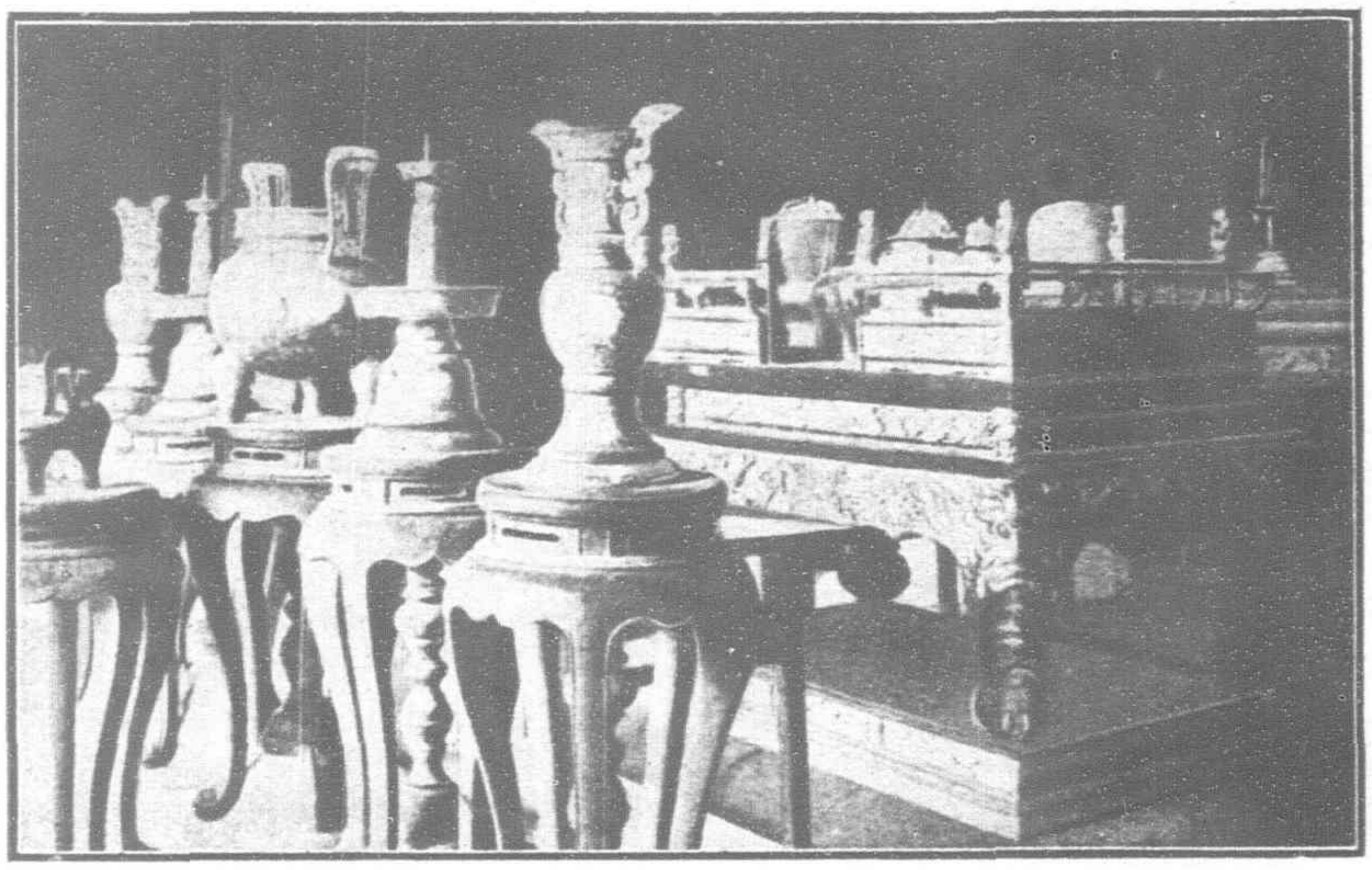
Plan of Taianfu and Tai Shan.

Tai Shan Mountain.

be carried out in Shantung. Later, he established an organ called the "Shantung Industrial Magazine" and started to interest the public in the subject. His earnest efforts have borne fruits, for recently the enthusiasm of the people has been stirred up, with the result that a number of industrial schemes are being contemplated.

One of these is the establishment of a spinning mill at Kaotang, a place famous for cotton production. A company has been organized there by a certain Chen Wen-chang for the purpose of manufacturing cotton yarn with the local production. It is said that the first payment on the subscription of shares has been made. The capital is understood to be of a small amount, however.

Another project is restarting the work of the Tungchang Spinning Mill. It must be remembered that this factory was established some years ago, but owing to mismanagement was reduced to the state of suspension. An order has now been issued by the authorities commanding the shareholders to resume the work. The matter being considered by the parties interested in the enterprise, something will be done toward the recommencing of operations.



The altar for offerings in honour of Confucius, as it now stands in the house of his 76th lineal descendant.

Altar in the Temple of Confucius at Chufu.

TOURIST FACILITIES IN SHANTUNG

Foreigners desirous of visiting this section of China will be interested to learn that there are in Shantung Province two distinctive points of Sacred Mountain Tai Shan. This is the sacred mountain of China. It was China's sacred mountain before Confucius was born. Tai Shan lies about 60 miles north of Confucius's grave and about 40 miles south of Tsinanfu, the capital city. At the base of the mountain is the city of Tai-an on the Tientsin-Pukow Railway. During February, March, April, and May hundreds of thousands of pilgrims from all parts of China come to Tai Shan to ascend the mountain and seal vows made on the sick bed or under extenuating circumstances. The mountain is about 4,500 feet above the floor of the valley. Granite steps 7,500 in number leadfrom the base to the summit. Thousands of bound-footed women totter up these steps during the pilgrim seasons to worship in the temples at the summit. The temples lining the route of ascent and gracing the summit are extremely interesting from historical and artistic points of view. Chair bearers carry those to the summit who can pay the price, which is $2for the round trip. It requires 4 hours to make the ascent in a chair and 2½ hours to come down.

There are at present no hotels or inns of foreign style at either Taianfu or Yenchowfu, but the Government is contemplating making accommodations at these places for foreign visitors.

Tsinanfu, the capital of Shantung, lies at the juncture of the Tsingtau-Tsinanfu railway and the Tientsin-Pukow line. It is a Chinese city of about 250,000 inhabitants and may be considered rather picturesque and interesting. The Chinese have set aside a large area of land west of the walled city for treaty port purposes for foreign business. This area is laid out in wide macadamized roads, lighted with electric lamps, and well policed. Quite a number of foreign firms, mostly German, have constructed palatial business and residence structures in this section and it presents the appearance of a thriving commercial city. There are two small foreign hotels located here with what the ordinary tourist would term very poor accommodations. A company is being organized to construct a modern foreign hotel, but it will probably be some time before Tsinanfu is provided with good hotel accommodations, although the business of the place would make it seem an inviting project.

Foreigners desiring to see some of the more interesting historical spots in China, places which combine historical interest and scenic beauty, would do well to try to arrange to visit Confucius's grave and the Sacred Mountain Tai Shan.

MANUFACTURE OF STRAW HATS IN TSINGTAU

The manufacture of straw hats for sale to Chinese and to foreigners has been under investigation by the straw-braid exporters of Tsingtau for several years. The possibilities for the success of such an enterprise were enormously increased by queue cutting among the Chinese, which seemed popular during and following the revolution in 1911-12. It is evident now to a traveler in North China that this radical change of custom has reached only a very small percentage of the population.

While there is a market among foreigners and those Chinese who have come in contact with foreigners in the treaty ports, it is assumed that in establishing a factory for the manufacture of straw hats greater dependence would be placed on the sale of a very cheap hat. Some protection for the head is necessary to the majority of the population, whose work keeps them outside under a powerful sun for long hours. Should queue cutting become prevalent, the market is promising.

First among the Tsingtau exporters to show his faith in the possibilities of the trade was an English straw-braid exporter, who started on a very small scale. Special attention was given to the manufacture of a large, soft hat costing about 4 cents gold to make, and retailing at 10 to 12 cents. Better grades retailing at 20 and 50 cents also find sale. Eight cheap Japanese machines are used in this factory, costing about $12 each. The braid used is that rejected by the English exporter.

EFFORTS OF SINGER SEWING MACHINE CO. AND GERMAN GOVERNMENT.

The establishment of a separate agency for the Province of Shantung by the Singer Sewing Machine Co. (with headquarters in Tsingtau) has brought to the field a foreigner who, by reason of his interest in the sale of hat-making machines, has stimulated interest in the industry. He has sold two machines to a German firm in Tsingtau which wished to experiment, and has recently made several sales to a mission school in the interior where straw-braid and straw-hat making is taught. The output from this school is entirely the cheap grade of hat.

The German Government has long been interested in the establishment of the straw-braid industry in the territory of Kiaochow. Its efforts have not been entirely successful; but a school has been established, and in connection with this it has recently been proposed to open a straw-hat factory under foreign management and using Chinese capital. The Singer sewing machine agent is desirous of furnishing the machines for this factory, and is exhibiting, in connection with an exhibit of the work of the straw-braid school, several hat machines in operation. This proposition, if carried out, will be the first attempt to take up the business on a large scale in Tsingtau.

The competition of hats made in Japan from Chinese braid will be most keenly felt. These hats, retailing at 20 cents gold, are considered better by the coolie than the cheaper hats made here.

TSINGTAU SOAP FACTORY

A German Chemist recently erected a soap-manufacturing plant in Tsingtau, which appears to be having considerable success. The idea is to manufacture toilet and washing soaps to be supplied to the natives at lower prices than the imported products.

The factory is run entirely by electricity, and has Chinese employees. It is said that pure fat only is used in the manufacture of the soaps, and the toilet soaps are claimed to be much superior to the imported soaps which can be purchased at anywhere near the same price. The soap is clean, mild, soft, and gives a strong foam in washing, with a delicate perfume, and will stand comparison with much more expensive imported products.

A novelty which has been introduced, is the sale of soft soap in enamel buckets. This is sold in graniteware enamel buckets holding 10 kilos, and sells complete with wooden cover for the bucket at $3.80 Mexican ($1.79 gold), a 5-kilo bucket of soap selling at $2.20 Mexican (1.03 gold). The cost of the bucket and soap together is less than the buckets alone in the regular retail shops of the city. This mode of selling appeals particularly to the Chinese, as they are particularly anxious to secure enamelware goods.

The soap factory sells its violet, lilac, heliotrope, and lily-of-the-valley scented toilet soaps in cartons containing three cakes at $1 Mexican (0.47 gold) per carton at retail. Other toilet soaps are packed four cakes in a carton and are sold at 50 cents Mexican (23 cents gold) per carton. Family toilet soap comes six cakes in a carton and sells for 50 cents Mexican (23 cents gold). Lanolin soap sells for 15 cents Mexican per cake and shaving soap at 20 cents per cake. Washing soaps come 25 cakes or bars to the case, each bar weighing 2 pounds, and sells for $5 Mexican (2.35 gold) per case. Tar soap, packed 25 cakes of 2 pounds to the case, sells at $4.50 Mexican.

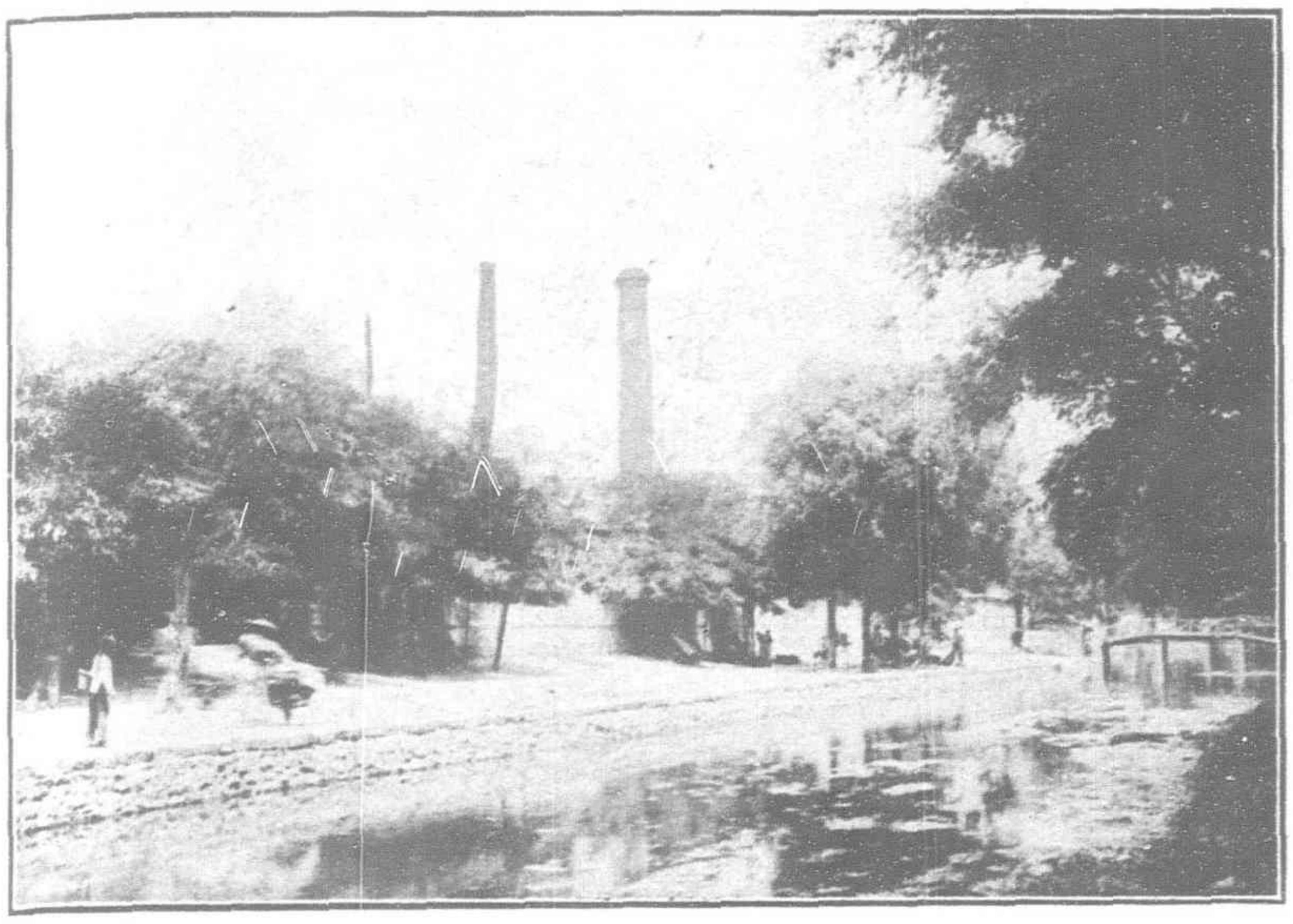
The machinery for this factory was secured from Germany.

DROUGHT IN AMUR VALLEY.

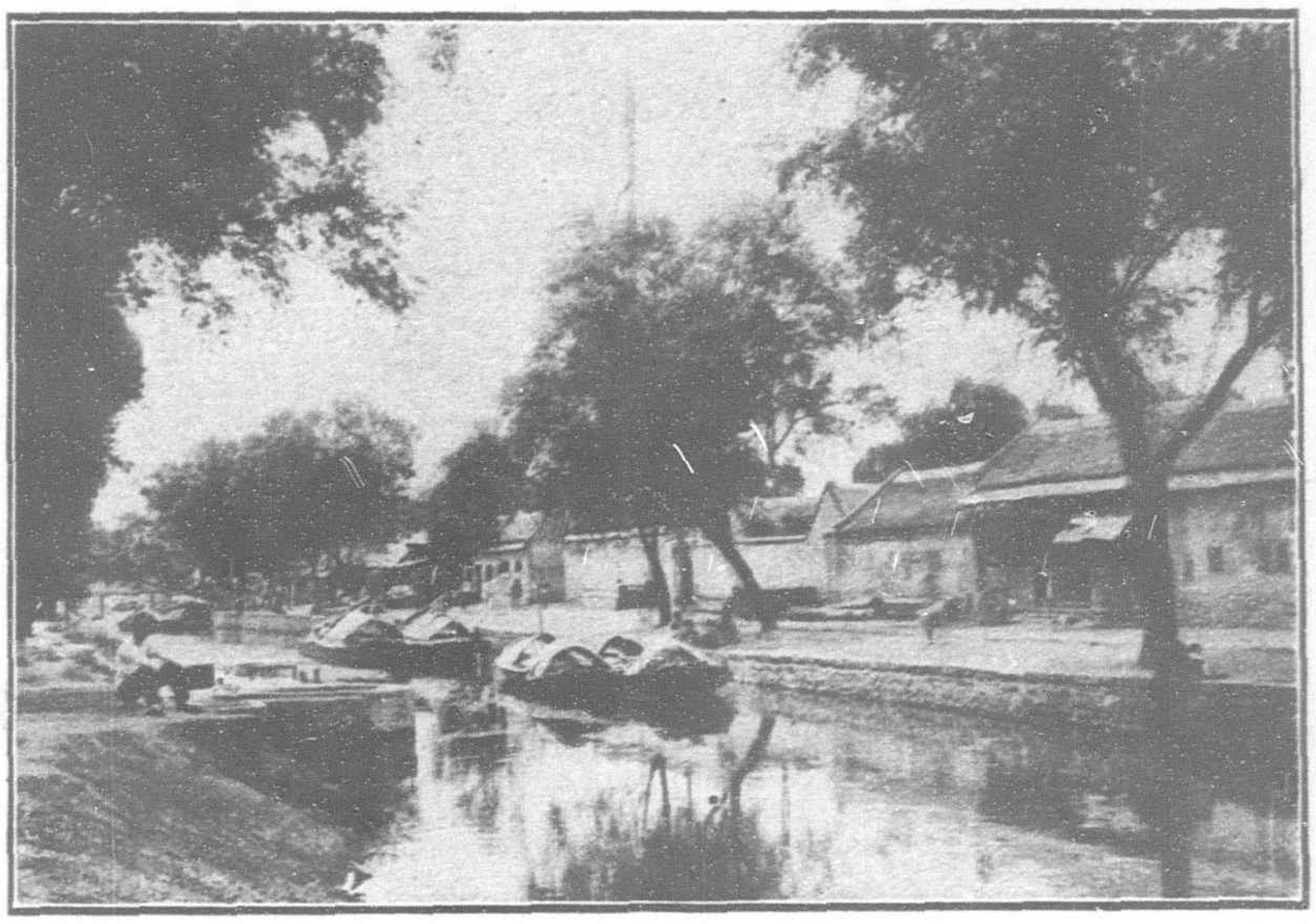
The *Manchuria Daily News* states:—"The long drought has shrunk up both the Sungari and the upper Amur so low as to make it difficult for even a steamboat to navigate. Most of the vessels, numbering about 120, which ply up and down these rivers are forced to lie idle. The losses of the shipowners so far this year have been heavier than all the profits of the recent years put together."

THE TRADE OF TSINANFU

(CONSUL GENERAL JULIAN H. ARNOLD)



VIEWS OF TSINANFU: The Tungliushui.



The Tungliushui, (the Long East River), from the West Gate.

Tsinanfu, the capital of Shantung Province, at the junction of the Shantung and the Tientsin-Pukow Railways, is next to Tientsin as a commercial center in North China. Shantung Province claims a population of 30,000,000, with an area one-third that of the State of California.

Tsinanfu has been growing rapidly since the completion of the German railway to Tsingtau, the best equipped harbor in North China. Ocean-going vessels can go alongside piers at Tsingtau for cargoes of peanuts, straw braid, hides, goatskins, tallow, bean and peanut oils, beef, live stock, coal, hemp, and eggs. These commodities are mostly collected at Tsinanfu, 250 miles by rail from Tsingtau, for shipment to Europe, America, and Japan, in exchange for piece goods, kerosene, lumber, railway materials, metals, machinery, matches, sugar, dyes, needles, soap, and canned goods from abroad transported by rail from Tsingtau to Tsinanfu for distribution over the Province. Tsinanfu is also connected by rail with Tientsin, 217 miles to the north, and with Pukow, on the Yangtze River, 400 miles to the south, an enormous trade being developed between Tsinanfu and these ports. Sometimes freight stacked in huge piles along the Tientsin-Pukow Railroad is waiting for days for cars for transportation to Tsinanfu.

A RAPIDLY GROWING CITY.

Tsinanfu has grown from a city of 80,000 inhabitants 10 years ago to a city of 300,000 to-day, and this number will probably be doubled within the next 10 years, for railways are about to be constructed connecting the Tientsin-Pukow Railway with the Peking-Hankow and the Taiyuanfu lines, thus placing Tsinanfu at the junction of railways running in all directions over North China.

Tsinanfu is at present the distributing center for a region embracing tens of millions of people. One may travel all over China and find few Chinese cities more busy and bustling in appearance than is the capital of Shantung. Thousands of native wheelbarrows, cargo carts, and jinrikishas form an unbroken line of traffic from the wide, well-paved streets of the foreign settlement into the gates of the picturesque, ancient walled city and over its narrow thoroughfares, only sufficiently wide to permit the passing of two wheelbarrows, and paved with granite slabs, badly worn by the never-ending procession of heavily laden wheelbarrows and cargo carts threading in and out, on close margins, in the general mix-up characteristic of street traffic in populous Chinese cities.

From the luxurious and spacious granite, red-tiled station, with its gorgeous stained-glass windows and beautifully tiled floors, of the Tientsin-Pukow Railway in the foreign settlement to the humble, low, poorly constructed mud or brick structures, with paper windows and earthen floors, the stores of hundreds of shopkeepers in the native city, goods, apparently from all corners of the earth, flow in almost constant stream on squeaking wheelbarrows and horseless cargo carts.

Likewise, enormous quantities of native produce and wares are being conveyed to the railway stations for shipment abroad, produce and wares which in many instances find their way to Tsinanfu from scores of country villages over badly kept roads, on mule carts, wheelbarrows, pack animals, and in some cases on the backs of human beings.

IMPORTS OF THE CITY.

As Tsinanfu is not a seaport, there are no customs returns of trade giving the statistics of imports from foreign countries and exports abroad. Imports and exports come and go through Tientsin, Tsingtau, Pukow, and over the Grand Canal to and from Tsinanfu.

It is impossible to give figures showing the quantities and values of Tsinanfu's foreign trade. A glance through the customs returns for the port of Tsingtau will furnish one a guide as to the character of goods being imported into and exported from Tsinanfu, for the bulk of Tsingtau's trade passes through Tsinanfu, although, since the completion of the Tientsin-Pukow Railway, increasingly larger quantities of goods are being shipped each year from Tientsin to Tsingtau for transhipment there to foreign ports.

The largest item in foreign imports for Tsinanfu is piece goods. Gray shirtings, English jeans, plain cotton chintzes, cotton italians, Japanese cotton yarns are among the main items in the importations of foreign piece goods. Between 5,000,000 and 10,000,000 gallons of American, and probably less than half of this amount of Dutch and Russian, kerosene are distributed annually along the Shantung Railway, most of it going to Tsinanfu for redistribution there.

Although Shantung raises considerable wheat and produces large quantities of native flour, yet the Shanghai and American mills ship large quantities of their products to this market.

SPECIAL ARTICLES OF TRAFFIC.

Tsinanfu is a splendid market for aniline and synthetic indigo dyes. A German manufacturer of indigo dyes recently sent a young man to Tsinanfu to learn Chinese and there represent this firm in its efforts to extend its business in Shantung Province.

Plan of Tsinanfu: (from "Shantung")

Huge quantities of Japanese matches are shipped to Tsinanfu for distribution among the trade in this section of China. During the year 1913, 7,000,000 gross of Japanese matches entered the port of Tsingtau, mostly for transhipment to Tsinanfu.

Building operations along the Shantung and the Tientsin-Pukow Railways require the use of considerable quantities of lumber and other materials. The people of Shantung, as in most thickly populated portions of China, have cut the timber from their hill lands, so that Shantung produces no lumber and is obliged to import that which is needed from northern Manchuria and Chosen (Korea) and from the United States. Oregon pine is being imported into this section of the country in considerable quantities.

China offers a good market for foreign soaps for laundry purposes. Tsinanfu shops carry large stocks of English, Japanese, German, and other foreign manufactured soaps.

Sewing machines and needles are being used in larger quantities each year. The Singer agent for Shantung informs me that his company now sells 2,000 sewing machines a year, whereas their sales in this Province 10 years ago netted only 100 a year. The company maintains sewing schools, with tuition free, and advertises extensively in Chinese throughout the cities and towns of the Province, and so gets business by going after it.

TOBACCO—RAILWAYS AND PORT IMPROVEMENTS.

The British-American Tobacco Co., also a very enterprising concern, through its admirable organization in the field, sells monthly 500 cases of 50,000 cigarettes each in Tsinanfu. A year or two ago the company sold 700 cases per month, but competition from Japanese and Chinese manufactured cigarettes has driven the sales down to 200 less per month for the present year.

Railway materials, mining tools, electrical machinery, etc., figure to a considerable extent in the imports for Tsingtau for transhipment to points along the railway, but as the railway from Tsingtau to Tsinanfu is a German line and that from Tientsin to the southern boundary of Shantung is German constructed, and as the coal mines along the Shantung Railroad are owned and operated by Germans, it is only natural to find that these materials are for the greater part of German manufacture. It is estimated that Germany has spent upward of G. $100,000,000 in improvements at its port, Tsingtau, and in connection with its railway connecting the splendid harbor facilities at Tsingtau with Tsinanfu, 250 miles in the interior of Shantung. These improvements were undoubtedly made with the object of furthering German commercial interests in North China, so that one need not be surprised to note the overwhelming predominance of German trade and influence along the line of this railway. In fact, the bulk of both the foreign import and export trade of Tsinanfu is done through German firms with establishments there.

EXPORTS OF THE PROVINCE—THE AMERICAN PEANUT.

Tsinanfu is one of the important centers in North China for the collection of native produce for shipment to Pukow or Tsingtau for transhipment to foreign ports.

Twenty years ago an American missionary resident in Shantung brought to his mission station, when returning from his furlough in the United States, a quart of California peanuts, which he gave to a native convert as seed to replace the poor shriveled native peanut which possessed little or no marketing qualification. To-day this quart of peanuts has spread all over Shantung Province, resulting in giving to these people an export trade in this article of 150,000 tons a year.

During 1912 there were exported to foreign countries 60,000 tons of shelled peanuts. It is estimated that an equally large quantity went to Pukow or to Chinkiang over the Grand Canal from Tsinanfu and southern Shantung, also for shipment abroad. About 30,000 tons of peanuts in the shell are exported from Shantung to foreign countries, mostly for confectionery and sale as roasted peanuts. The shelled peanuts are shipped mostly to Europe, the larger quantity going to Marseilles, for use in manufacturing toilet soaps. The American market is taking increasingly larger quantities of Shantung peanuts, both shelled and unshelled, each year. The manufacture of peanut butter and the use of peanut oil in high-grade butterine in the United States seem to be making the demand larger each year.[1] The peanut is a fall crop, and shipments are made from November to June of each year. The price of shelled peanuts ranges from $2.30 to $3 U. S. gold per hundredweight (English hundred-

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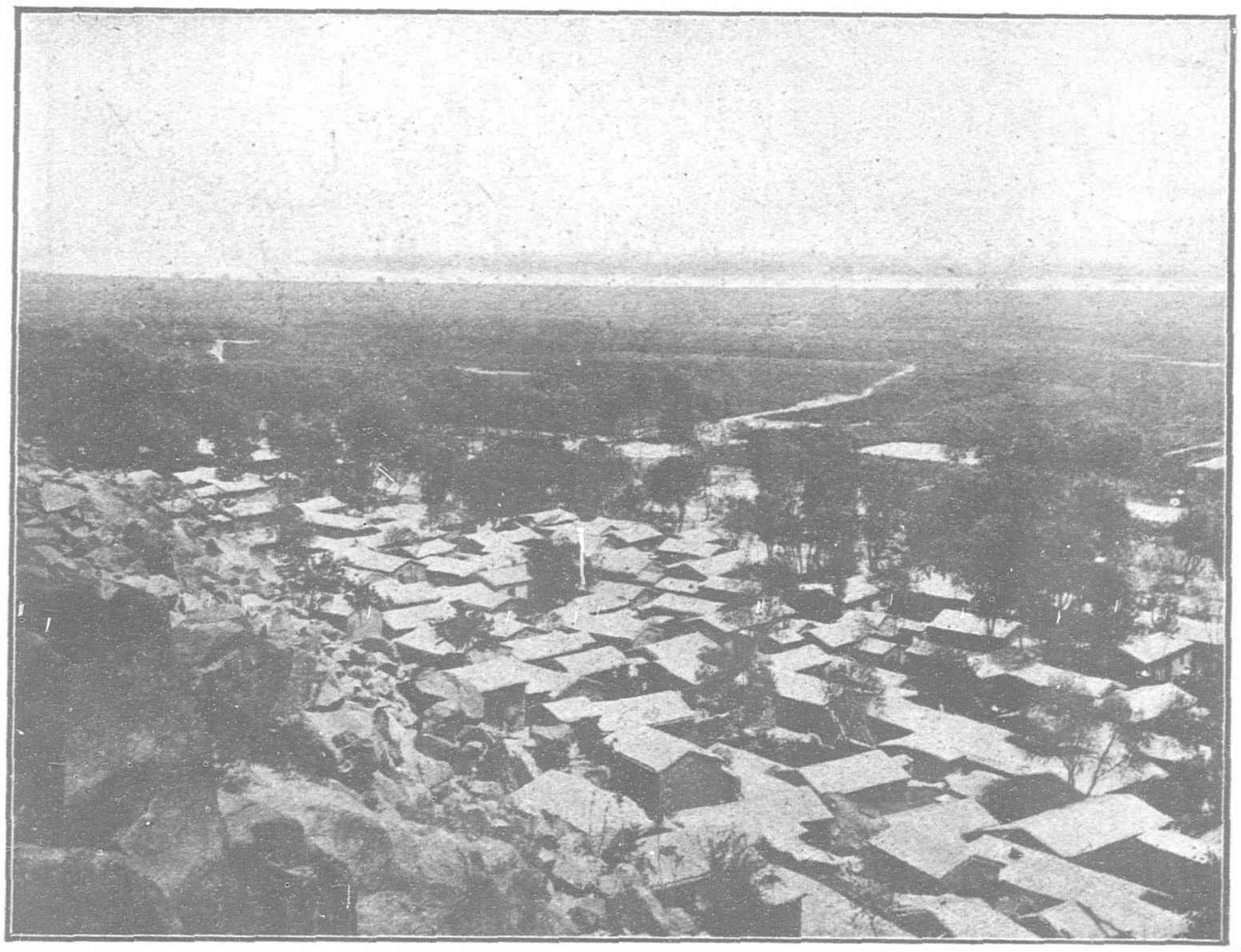
[1] NOTE.—The importation of peanuts into the United States was not of sufficient importance to be separately classified in statistics prior to 1910. In that fiscal year the total was 29,276,235 pounds, valued at $1,234,088. There was a decline the next year to 18,834,441 pounds, worth $765,033. In the fiscal year 1912 the imports of peanuts totaled 15,558,038 pounds, valued at $575,282, advancing in 1913 to 19,082,995 pounds, worth $782,787. In the fiscal year 1914 (twelve months ended June 30) the imports of peanuts reached the large total of 44,549,789 pounds, valued at $1,899,237. The unshelled peanuts have a foreign invoice value of about 3¾ cents and the shelled about 5½ cents per pound.

American imports of peanut oil were shown separately in statistics first in 1912, when the total was 895,587 gallons, worth $582,740. In the next year the imports were 1,195,683 gallons, worth $820,763. In the fiscal year 1914 the total imports went up to 1,337,136 gallons, valued at $918,614. The foreign invoice value is nearly 70 cents per gallon.

While the importation of peanuts and peanut oil is considerable, it forms a comparatively small part of the consumption of these products in the United States. Probably 50,000,000 bushels of peanuts are now produced annually on American farms.



VIEW FROM TSINANFU: The Yellow River, in the Distance.

weight=112 pounds) at Tsinanfu. It costs about $0.12 per hundredweight to ship them from Tsinanfu to Tsingtau or Tientsin. Selected unshelled peanuts sell for from $2 to $2.40 per hundredweight at Tsinanfu. They are shipped in large gunny bags.

Peanut oil is also an article of export from this Province to the extent of about 20,000 tons annually. The bulk of the peanuts in this Province are produced in the central and southern sections. Three tons to the acre is considered a very good yield, but the average yield is a little more than two tons. One seldom finds one family raising as much as an acre of peanuts. As there are nearly 600 persons to the square mile in Shantung the farms are necessarily small. The farmer gets about 1 cent (gold) a pound for his unshelled peanuts at harvest time. The price advances to about 1½ cents a pound within six months, as the ordinary farmer has no storage facilities or methods of financing his crops; moreover, there is a certain shrinkage in weight and measure over this period of time.

Shantung Province also exports a good quantity of walnuts each year, probably about 1,500 tons. These are not cultivated as foreigners understand the term. They are shipped to Austria, Holland, Germany, and the United States.

STRAW BRAID AND STRAW HATS.

While in the leased German territory of Kiaochow straw braid is not produced to any appreciable extent, the great bulk of China's trade in that line filters through Tsingtau from the hinterland and is shipped from this port.

The whole industry from the cultivation of the straw to the packing for shipment, including the sorting, bleaching, and plaiting is done by Chinese men, women, and children. The trade in straw braid with the United States is increasing rapidly, the better qualities going to that market.

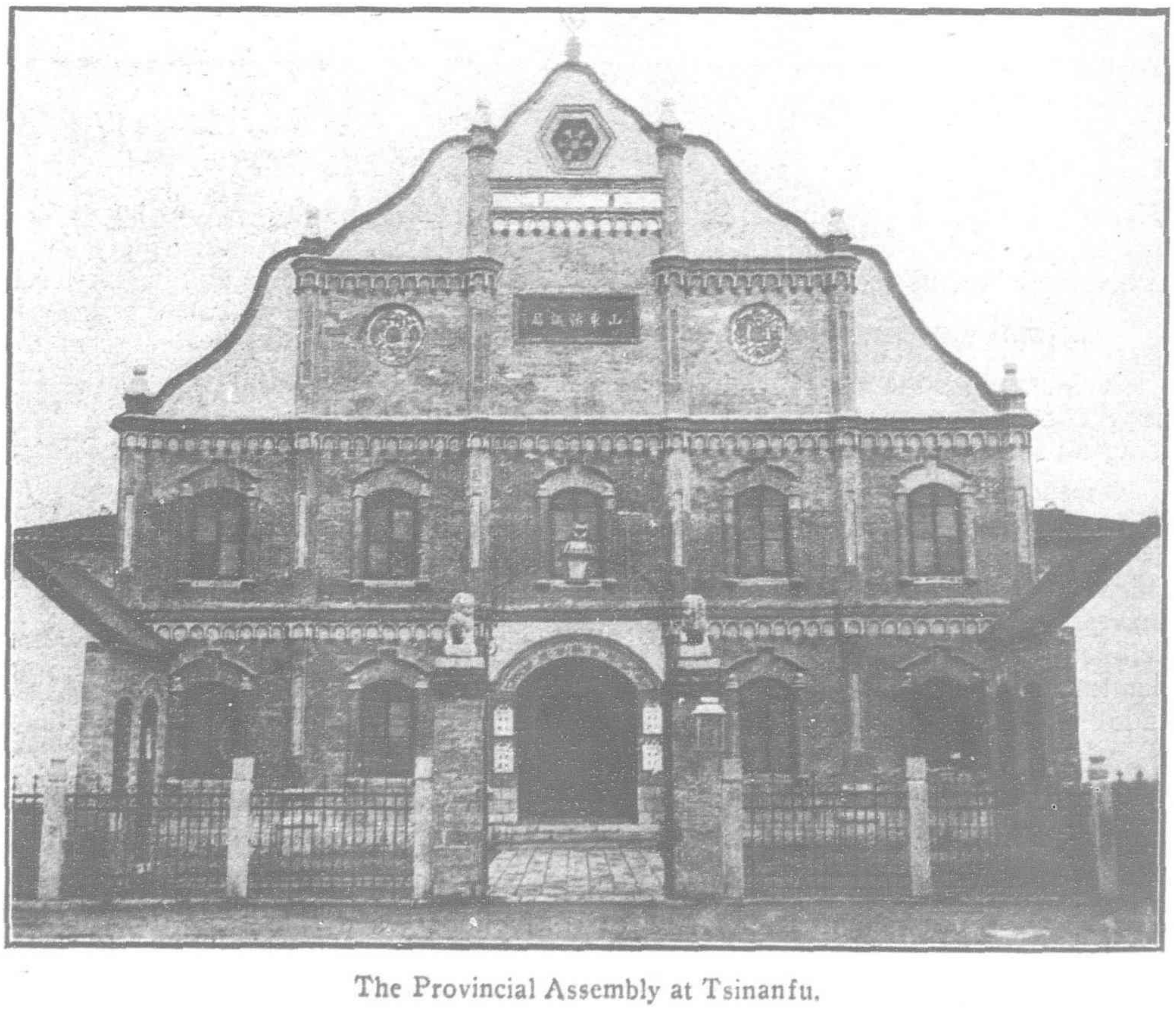
Tsingtau is the recognized great straw-braid center of China, and the leading exporting firms of the Far East have large branch houses with expert straw-braid men in charge of that department.

The straw is grown by the farmers in Shantung, and the industry is of great importance. The straw braid is made by peasants of both sexes and all ages and is exclusively a household industry. The better quality as shipped to the United States is plaited by girls of experience and ability, while the ordinary qualities are made by the aged and very young. During the summer months, while the men are employed in the fields in the cultivation of the straw, the family are employed in plaiting, to meet the orders with which they are well supplied. Where persons are employed to help out families, the wage varies from 10 to 40 cents Mexican ($0.045 to $0.166 United States currency) per day, those earning the latter wage being considered experts and employed on the highest grades.

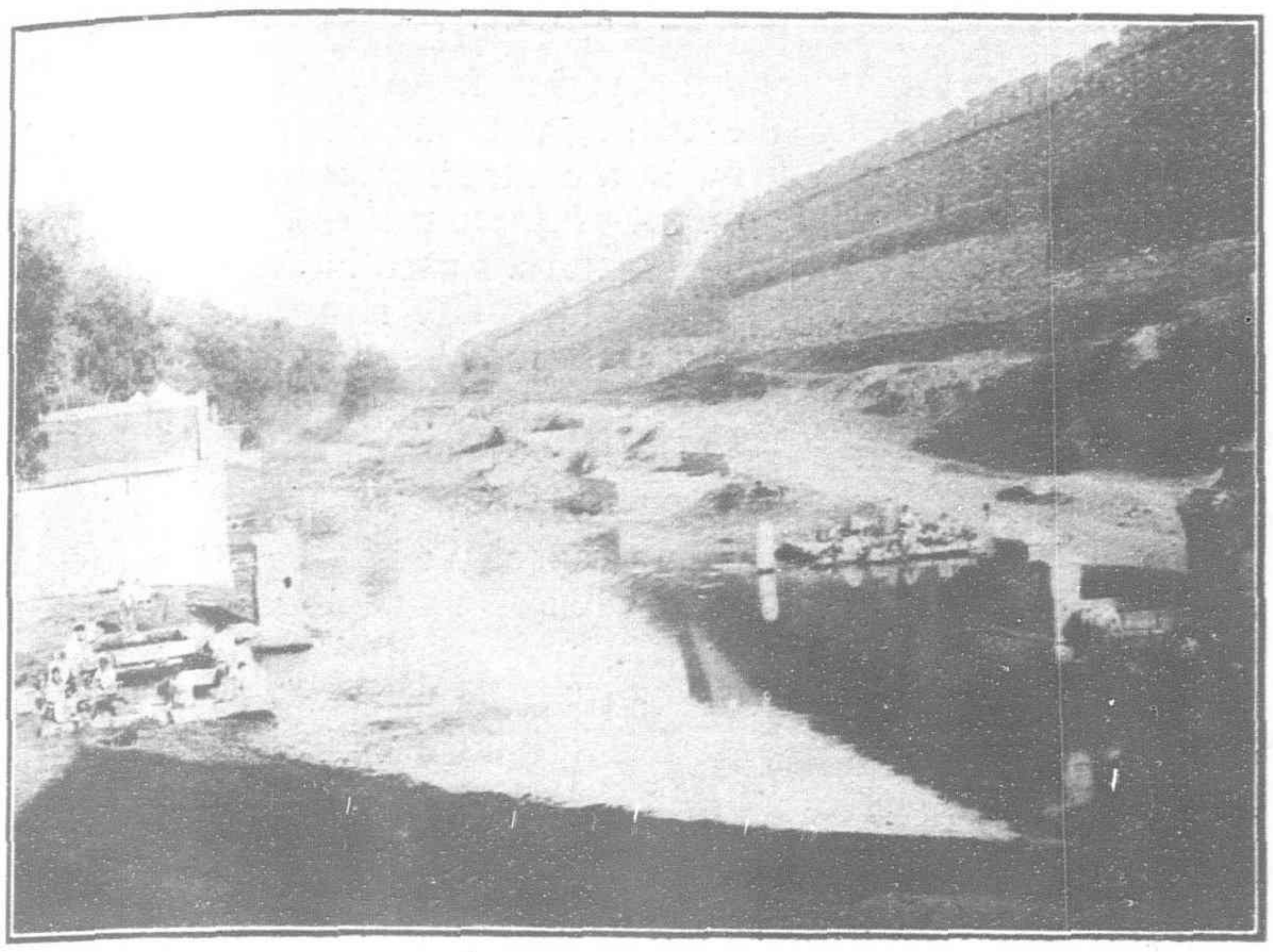
Where the straw is not grown by the farmer and his family employed in plaiting, the raw material is furnished by the dealers at a contract price with the head of the family, who, should the occasion demand, calls in the required help to fill the orders.

The system of doing business in the straw-braid industry commences with numerous small dealers, who travel throughout the interior buying up small parcels of the various qualities of braid and carrying them to certain local markets to be sold to the larger so-called manufacturers. These pieces are matched, joined together, bleached, and bundled, and shipped to their agents in Tsingtau to sell to the foreign exporters on a commission basis. These Chinese dealers are good traders, and they hold out for their price, which has of late been rising.

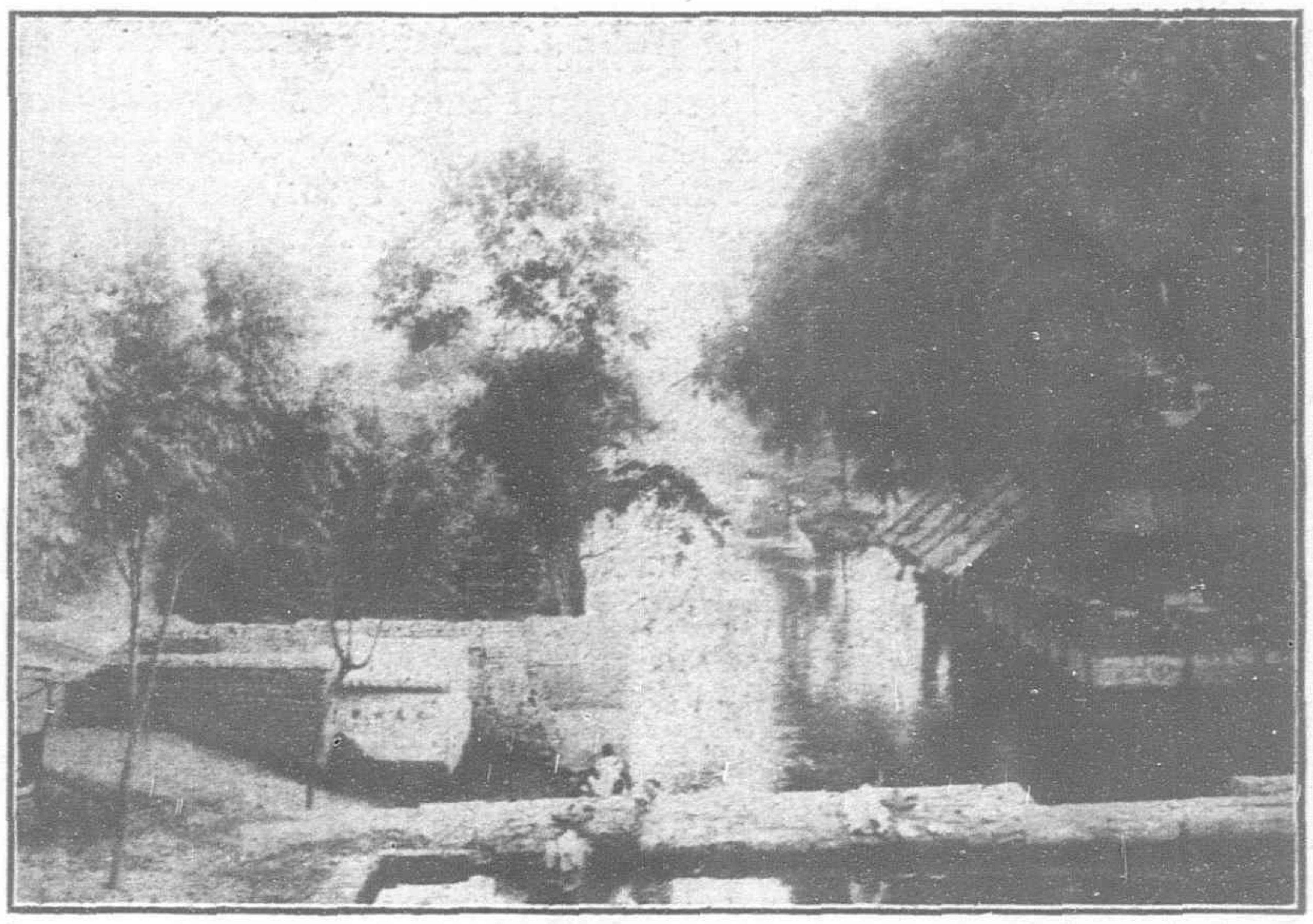
About 6,000 tons of straw braid go from Shantung each year to foreign countries for manufacture into straw hats. The straw braid is made of wheat straw, hence can only be produced in those sections of China growing wheat, which means the north, or rather that section north of the Yangtze River. Even in the wheat-growing sections there are only certain districts which produce straw braid. For instance, in Shantung Province, although wheat is raised in most districts, the production of straw braid is confined to one or two sections.



The Provincial Assembly at Tsinanfu.



VIEWS OF TSINANFU: The Walls.



The River at the East Gate, alongside City Wall.

The best braid is produced in the Shaho district north of Weihsien, on the Shantung Railway. The visitor to the Shaho district at any time, except when the wheat is being harvested, would find the entire population engaged in stripping, cutting, or plaiting straw for straw braid. Only that part of the straw above a foot from the root and below about a foot from the head can be used for braid. Pieces 5 and 6 inches in length are thus secured, cut lengthwise into a number of strips, and then dampened and plaited. The better qualities are used for first-grade braid. The women and children can make 1 or 1½ cents (gold) a day at this work, which means much toward augmenting the earnings of the small farm.

Brokers buy the plaited braid for shipment to Tsingtau for the foreign exporters. Labor is so cheap in China that it will probably not be many years before the bleaching, now done in England and Germany, will be undertaken in China, and the straw hats manufactured here at a fraction of the present foreign cost. A straw-hat factory at Tsingtau now makes a cheap-grade hat for Chinese use.

HIDES, CATTLE, AND BEEF.

Upward of 200,000 cowhides are exported annually from Shantung, the trade centering at Tsinanfu, and shipments being fairly equal to Tsingtau, to Pukow, and over the canal for transshipment abroad.

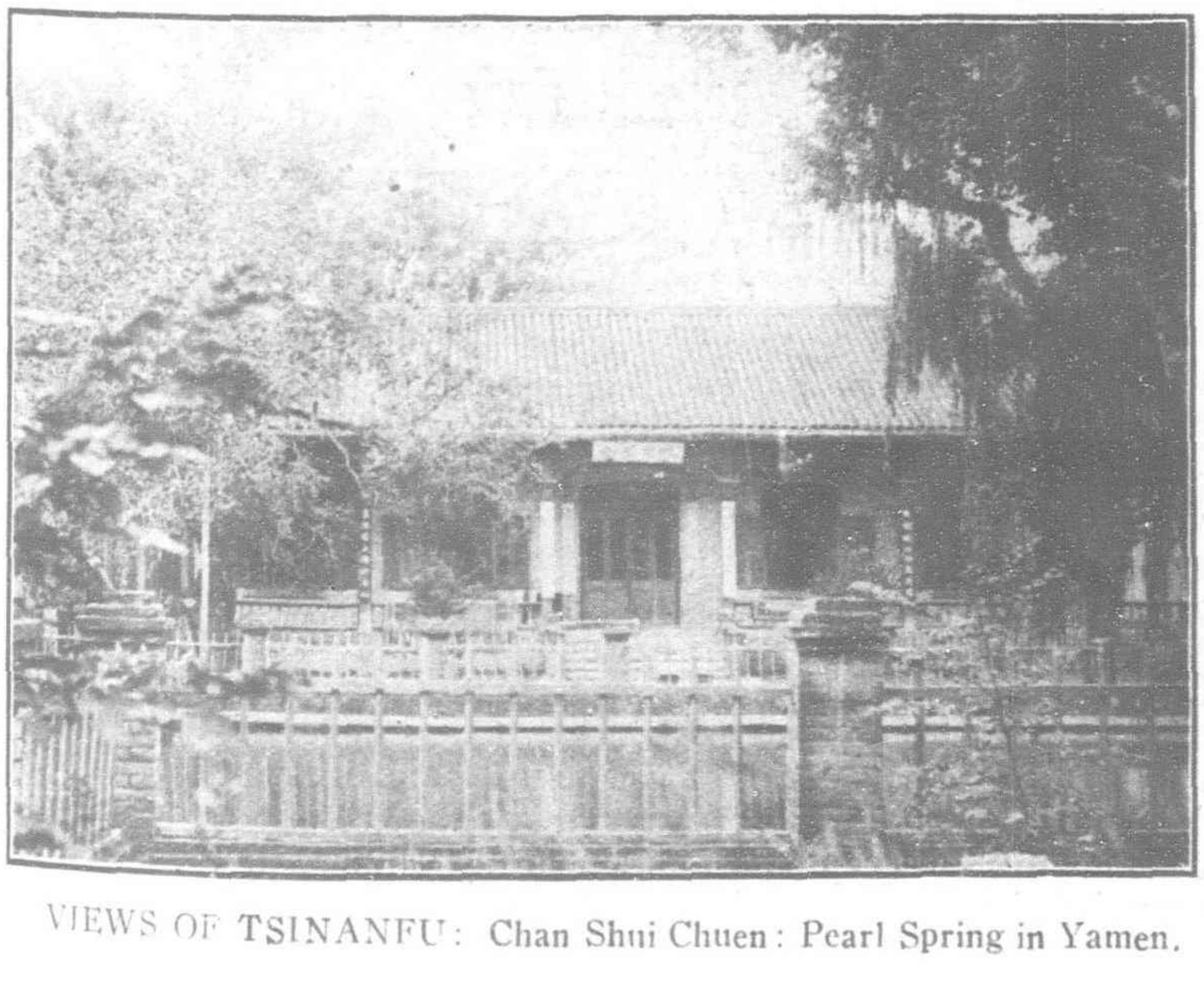
Goat, pony, donkey, mule, dog, weasel, rabbit, and cat skins are also exported from the Province in considerable quantities. These skins are prepared for shipment in Tsingtau, where a large German firm maintains a power press which is rented for pressing hides into bales for shipping.

About 2,000 tons of Shantung tallow were exported during 1913 from Tsingtau. A great part of this was prepared at Tsinanfu, and a considerable quantity was also shipped from Tsinanfu via Pukow.

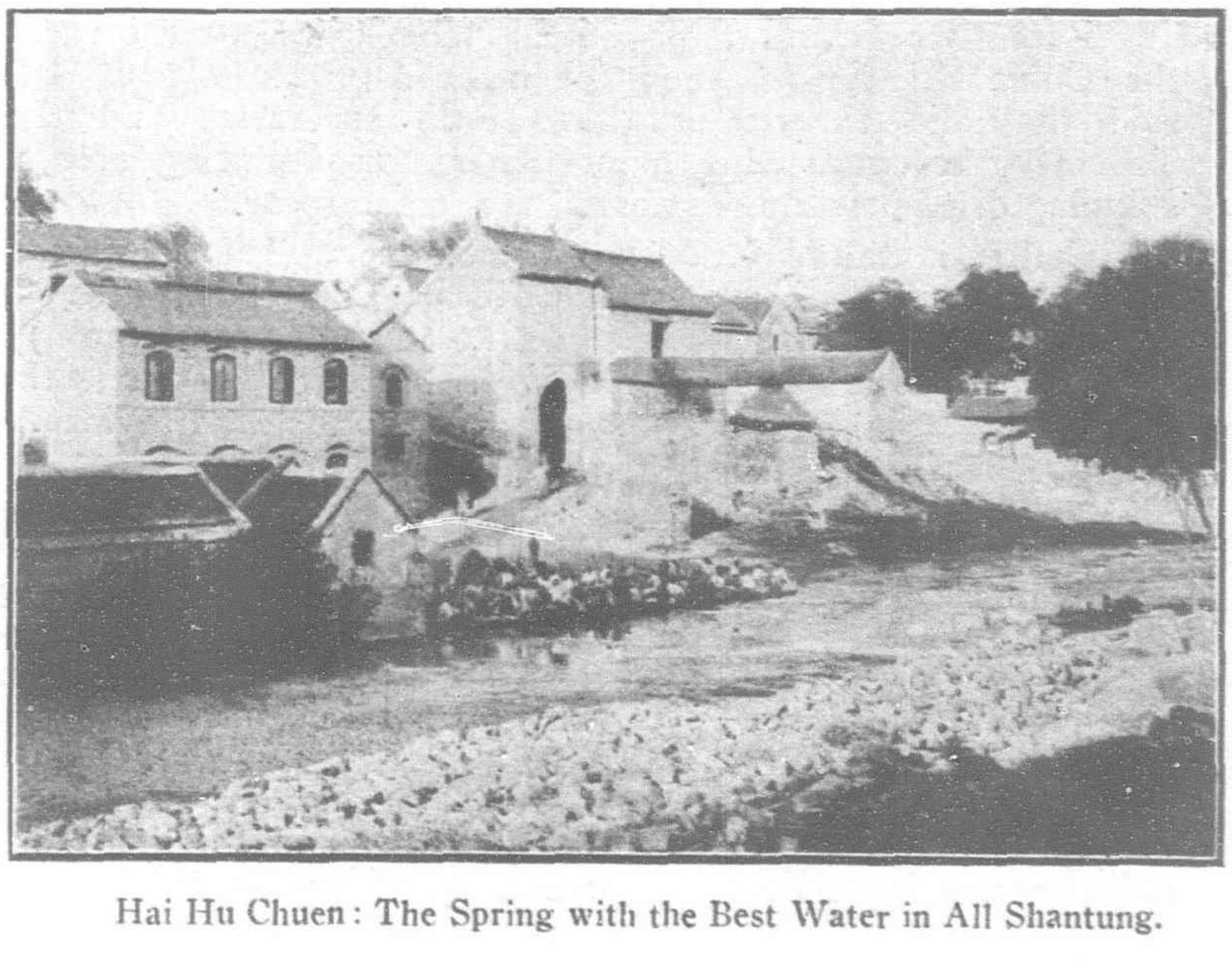
The Russian Army in the East receives a large portion of its supply of beef from Shantung. Dressed beef and cattle on the hoof are shipped from Shantung via Tsingtau to Vladivostok. Owing to the presence of a considerable population of Mohammedans in Shantung and the Provinces west, large quantities of beef are raised and consumed here. Chinese, other than Mohammedans, eat no beef, considering the cow a farm animal; neither do they breed milch cows, hence there are no dairy interests in China. There were exported from Shantung in 1913, 93,000 quarters of beef, considerable of which went to Vladivostok and Shanghai. The cattle weigh 800 to 900 pounds and sell for about $25 (gold) a head at Tsinanfu. Transportation to Tsingtau is at the rate of $20 gold per carload of 15 head. The quality of beef is good. It would be to the advantage of the Army authorities in the Philippine Islands to consider the possibility of Shantung beef for the Army in the islands. The German authorities maintain in Tsingtau a municipal slaughterhouse under Government inspection where cattle may be slaughtered at fees fixed by the authorities.

THE EXPANDING EGG AND POULTRY BUSINESS.

During recent years, since the completion of adequate transportation facilities for central Shantung, large quantities of eggs, fresh and in powdered form, have been shipped abroad. This trade has been made possible by the running of refrigerator



VIEWS OF TSINANFU: Chan Shui Chuen: Pearl Spring in Yamen.



Hai Hu Chuen: The Spring with the Best Water in All Shantung.

ships to England, and it is understood efforts are being made to run refrigerator ships across the Pacific to carry Shantung eggs and beef to America. The International Cold Storage Co. of Great Britain, has been buying fresh eggs in Shantung for shipment to England at 360 eggs for $1 U. S. currency. Fifteen years ago one could buy 900 eggs for this sum. But 360 for $1 is considered the lowest price at which eggs can now be secured.

The Shantung eggs weigh 10 to 1 pound and seem to be rather dark in color. It is estimated that upward of a million eggs a day are shipped from Shantung during the season; that is, during the spring, early summer, and fall. For shipping purposes they are packed in boxes, 500 to the box, with straw filling. They are shipped in carload lots, 580 boxes to the carload, and repacked at Pukow or Tsingtau for transportation abroad.

A factory at Tsingtau also buys eggs for separating the whites from the yolks for making albumen and dried yolks for shipment to Germany.

Considerable poultry is also shipped from Shantung for transportation to England under cold storage. The Shantung chicken is small and poorly fed; dressed, it weighs on the average 1½ pounds, and sells for 10 cents U. S. currency in the southern part of the Province. Goodly numbers of eggs or chickens can not be secured from any one producer, as there are no such things as poultry farms in China, each farmer or household raising a few chickens and eggs for market purposes, the aggregate making a huge sum total, as the number of farms and households is very large. Purchases of these products, as well as of other farm products, are generally made in the market towns on market days, when people from the surrounding country take their produce to the market and hold it there for general sale.

MULES AND DONKEYS.

Mules, comparing favorably with a good-grade American mule, can be bought in lots of 20 or 30 at a time for $120 to $150 U. S. currency each. They will measure about 14 or 15 hands and weigh 1,200 to 1,400 pounds. A smaller type can be purchased at lower prices and is adaptable for mountain work. Southern Shantung also produces a large number of donkeys, which are offered for sale at the donkey markets. They sell for about $10 U. S. currency.

The German and British Army authorities have been buying mules in Shantung. It would probably be to the advantage of the Army in the Philippine Islands to investigate the advantages of securing mules from Shantung.

VARIOUS CROPS—JELLY FROM PERSIMMONS.

Sesamum seed, kaoliang (sorghum), Indian corn, China dates, sweet potatoes, etc., are raised in large quantities and the prices are such as to permit of exportation. Sweet potatoes may be said to be the staple crop of China. There is no section which does not raise them and they are a substantial part of the diet of a greater part of the Chinese people.

Recently experiments have been made looking to the use of the China dried persimmon for manufacture into jelly. It is said that the experiments have been successful and that Tsinanfu, the center of a large persimmon-producing area, is shipping dried persimmons abroad for this purpose.

Cotton is raised in western and southern Shantung in considerable quantity. The German Government intended putting in a cotton press at Tsingtau and was to charge 10 cents (gold) a bale for pressing, as against the present price of five times this amount, so as to encourage cotton growing in the Province.

INDUSTRIAL AND MANUFACTURING PLANTS.

The visitor to Tsinanfu for the first time would probably be greatly surprised at finding a city of such size and activity devoid of modern manufacturing plants and factories. An electric-lighting plant furnishes about 4,000 lights in Tsinanfu at 35 cents Mexican (17 cents gold) per kilowatt unit. This concern is Chinese, but was built and equipped with German superintendence and materials. It is making an attempt to enlarge its plant, as it can not supply the demand for lights, but it is experiencing difficulty in expanding.

PAPER FACTORY.

There is a Government paper factory in the buildings formerly occupied by the Mint; the machinery, which was supplied by a German firm, at a contract price of 110,000 taels, is said to have a possible output of 4,000 catties (5,333 lbs.) per working day of 12 hours. The materials used in the manufacture of the paper include rags, wheat and paddy straw, cotton waste, hemp and jute. It is not at present in operation.

In the near vicinity of Tsinanfu is a Government arsenal for the manufacture of powder and cartridges, employing about 1,000 men.

A modern flour mill, with a capacity of 30 barrels a day, is in operation in Tsinanfu under Chinese management, and seems to be doing a profitable business.

A Chinese match factory is about to be erected in Tsinanfu to compete with Japanese manufactured matches.

There are many small Japanese weaving mills in operation throughout the city.

In addition to those already established in this province, a new cotton spinning and cloth weaving factory was opened in 1908 in Chi-mo-hsien, not far from Tsingtau. Gins, looms and other machinery of modern make were purchased abroad. The raw material is drawn exclusively from the province.

The most successful industrial venture under Chinese management and control in Shantung is the Chung Hsing Coal-Mining Plant in Yi Hsien in southern Shantung. This concern is capitalized at about $3,000,000 U. S. currency, and claims to be taking out 1,000 tons of good-quality coal a day. Recently the manager purchased 200 freight cars for marketing his coal. In this connection he bought two Baldwin locomotives. His mines are equipped with the most modern machinery, supplied by German manufacturers, and there is operated in addition to the coal mines a plant for manufacturing fire bricks, coke, and tiles. The company is also putting in a cement-manufacturing plant. The mine operates its own electric plant, furnishing light and power throughout its mines. The company employs about 3,000 men, who receive an average wage of 10 cents a day and board, which costs the company about $1 per man per month. Lodgings are also furnished the men, but at small cost to the company.

FOREIGN BUSINESS METHODS IN TSINANFU.

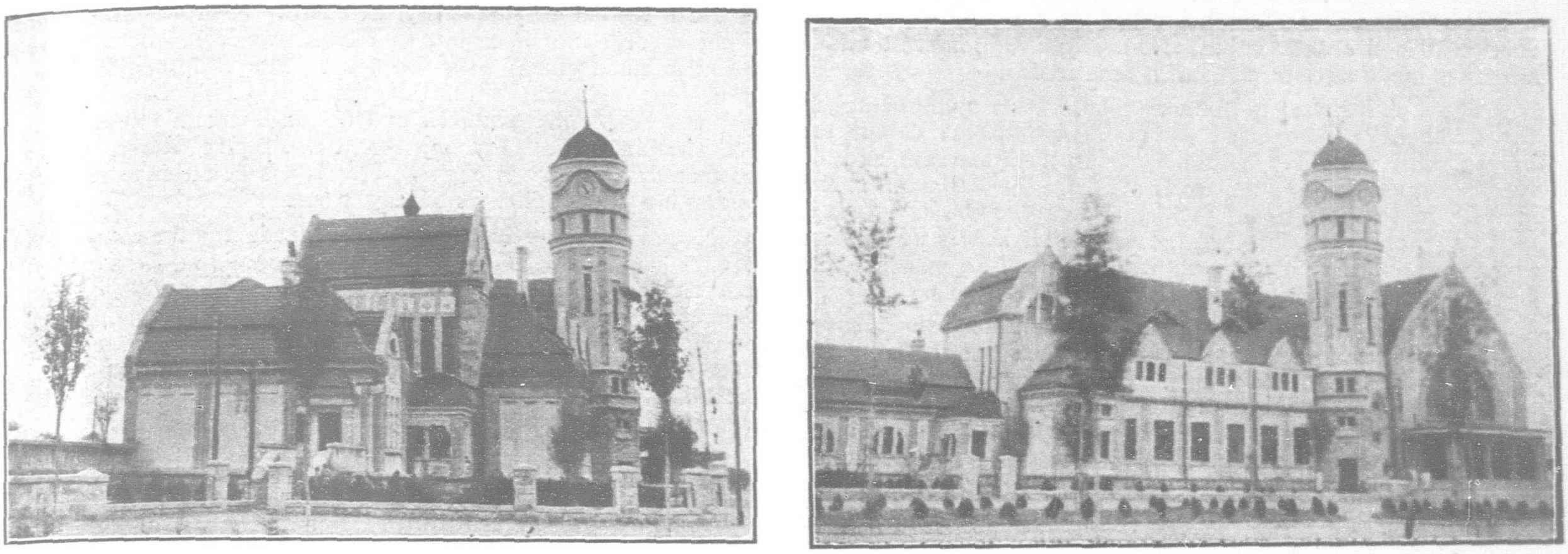
The foreign firms doing business in Tsinanfu depend in a great measure upon their Chinese compradores or go-betweens. The Chinese compradore, through his staff of native buyers or salesmen in the interior cities and towns, collects the native produce or distributes the foreign wares, furnishing credit guaranties for both sides.

The buyers in the interior are given two and three months credit under the compradore's guaranty. The compradore himself is obliged to give to the foreign firm with whom he is employed security against loss. Generally speaking, the foreign firms seldom lose through lack of ability to recover, unless they have been careless in choice of compradore or in satisfying themselves as to the nature of the security offered.

CURRENCY AND RATES OF EXCHANGE.

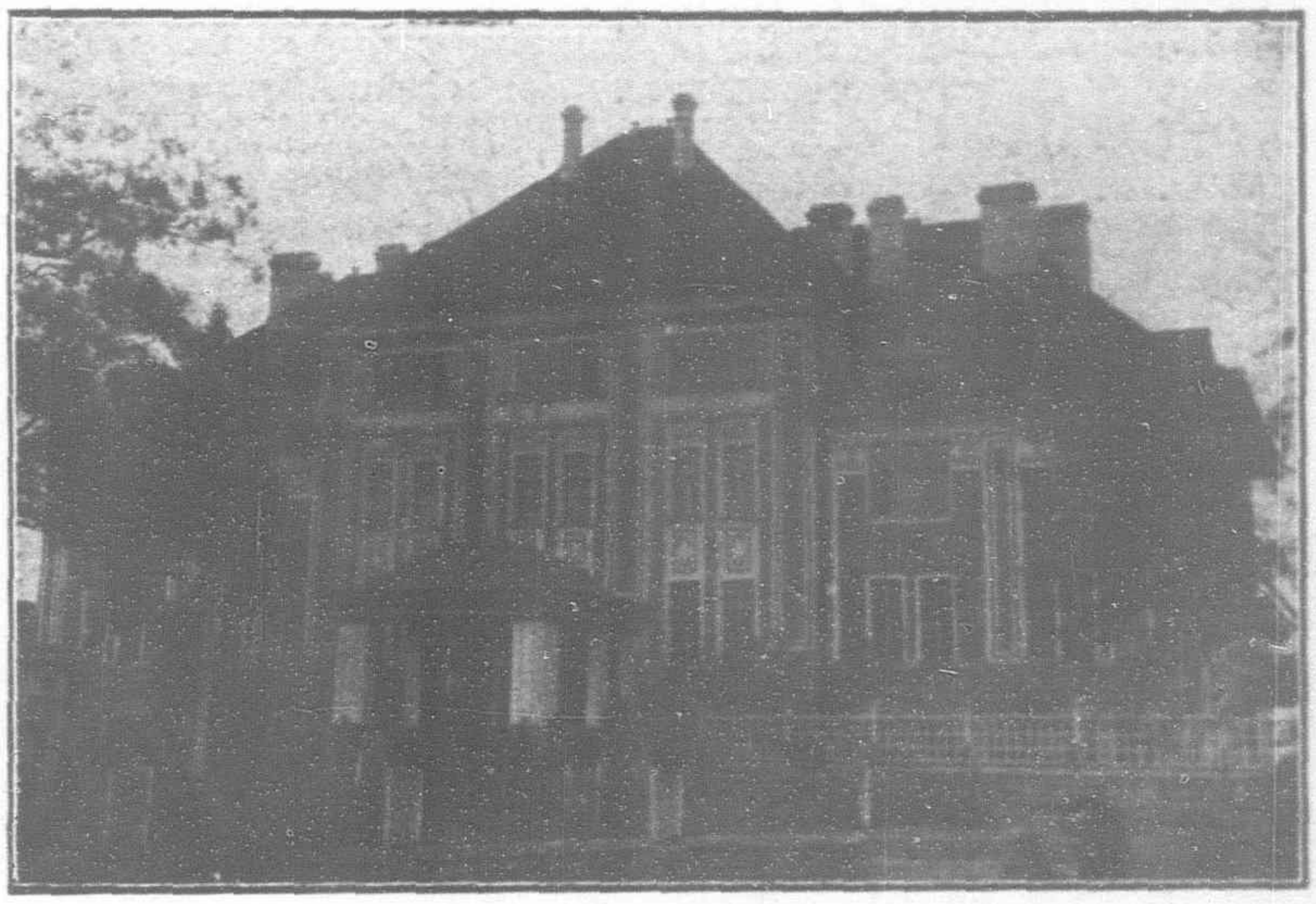
Business in the interior is done in Chinese currency, on the basis of the Tsinanfu or Tsiping tael as a unit. In the vicinity of Tsinanfu accounts are reckoned on the basis of the so-called small tiao, the Tsiping tael exchanging when this article was written at 3,900 tiao and the tiao at 49 copper cents. These rates of exchange vary each day, as also does the dollar Mexican which, on June 1, 1914, exchanged for tiao 2,630.

Business in the Tsiningchow district farther south is done on the basis of the large tiao, which is, generally speaking, reckoned at twice the value of the small tiao, varying, however, from day to day. The foreign merchant of recognized standing among the Chinese can overcome considerable of the inconvenience in the intricacies of exchange from one unit to another by the use of what are known as huipiao, or return credit notes, which will be accepted in payment by Chinese in the interior, provided the firm is well known there.

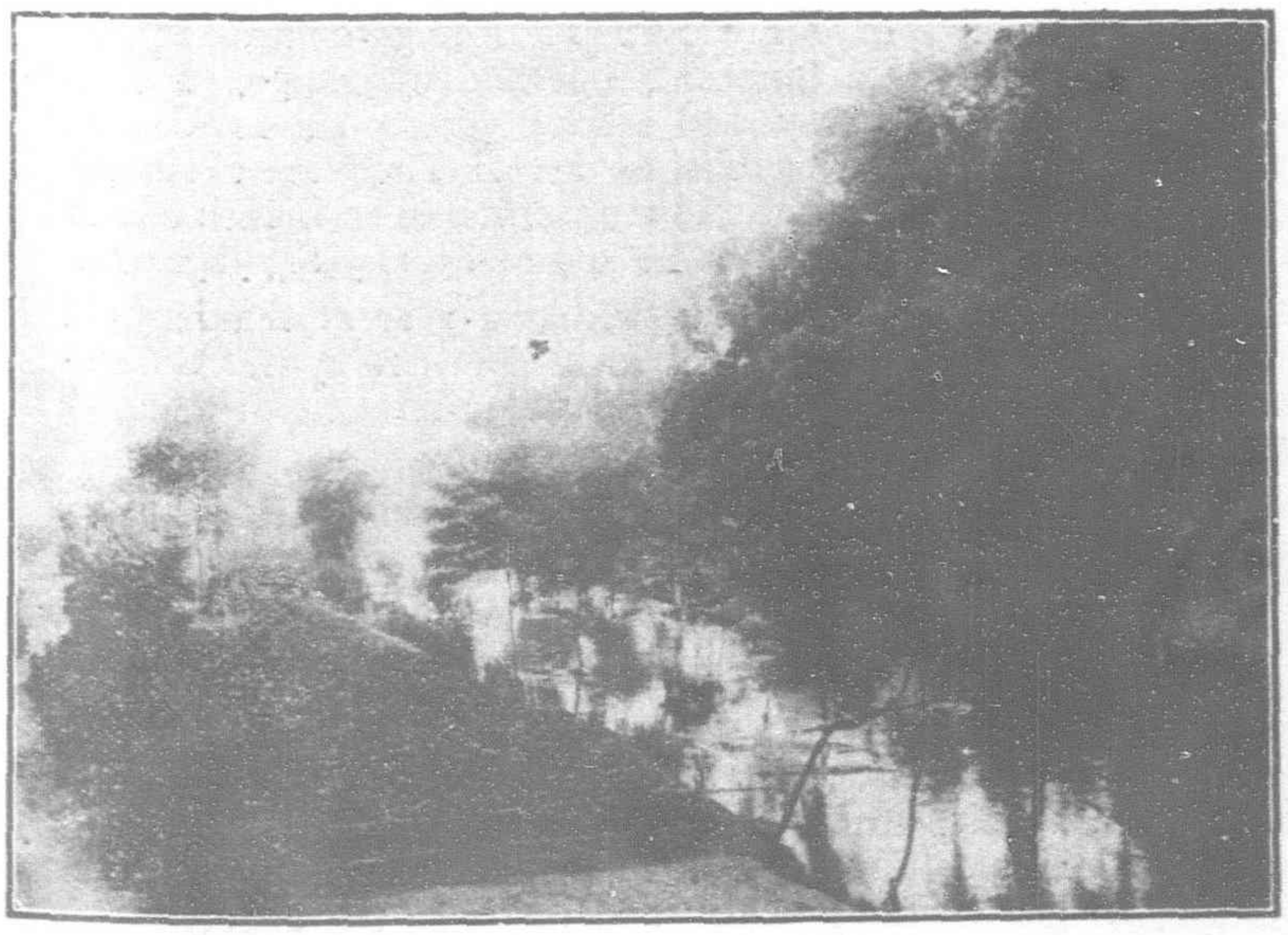


The New Tientsin-Pukow Railway Station.

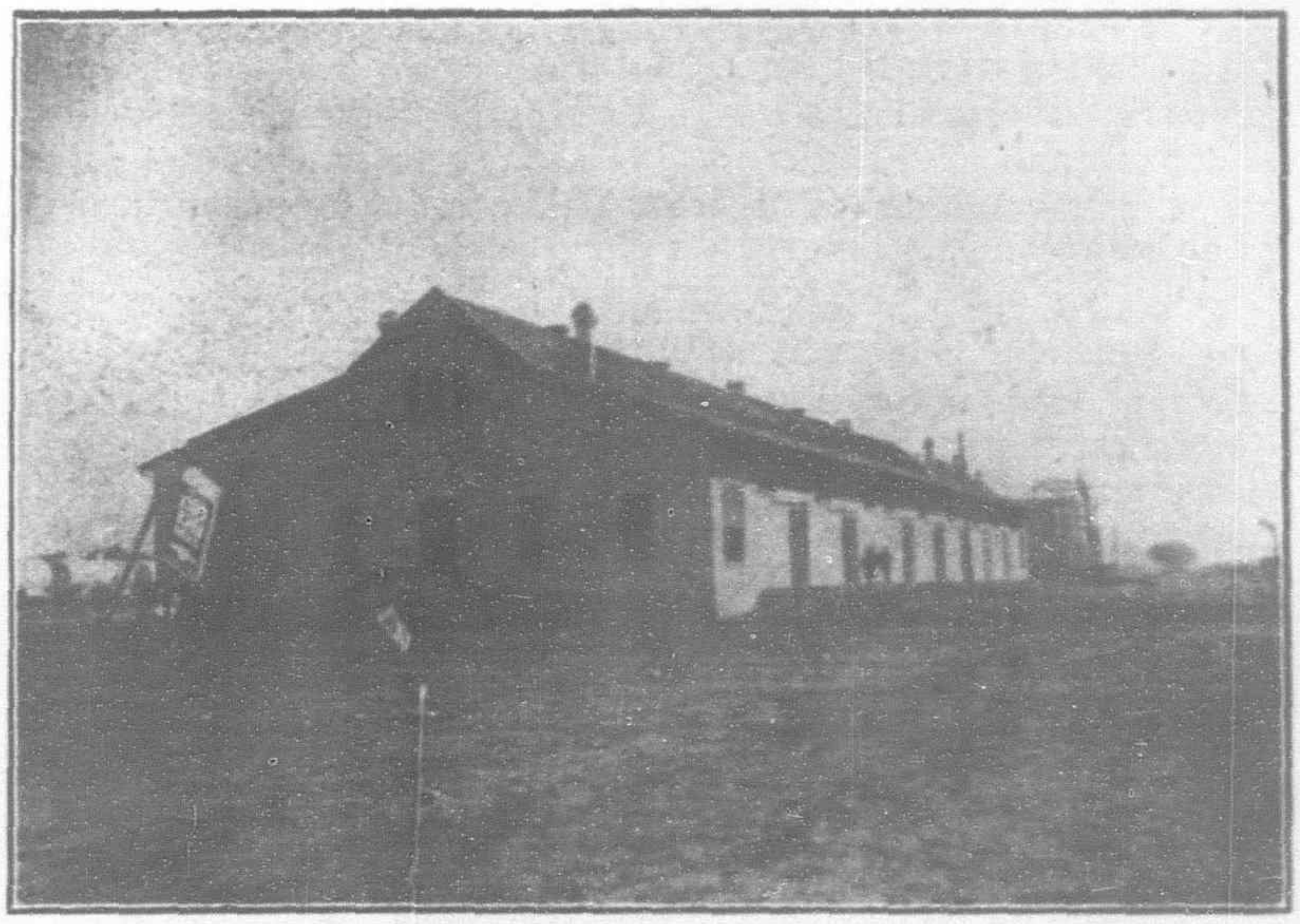
The Shantung Railway Station.



The Tientsin-Pukow Railway Administration Building.



Liu Yuen: A Beautiful Park on the River Banks, Near the City Wall.



The British-American Tobacco Company: Godown and Office.

VIEWS OF TSINANFU.

The return credit notes are to some extent negotiable within a certain district and can be cashed after a certain date at the foreign firm for face value. Naturally certain interest allowances are made in connection with time credits.

The Tsiping tael is not a coin, but rather a unit of weight for silver of a recognized purity. The Mexican dollar, the copper cent, the silver subsidiary coins, the brass cash, and the various bank notes all fluctuate in value one toward another, and in relation to the Tsiping tael unit as well from day to day, requiring an intimate knowledge of the intricacies of Chinese exchange in order to keep up with the changing values. The diao is also an imaginary standard for the copper coins.

The German Government at Tsingtau has coined silver subsidiary coins on the decimal basis, and these are accepted and paid out for their face value in relation to the Mexican dollar, or rather the bank notes of the German bank. These are in use along the railway and to some extent in Tsinanfu, exchanging 10 dimes for 1 dollar, in place of 12 or 12½ to the dollar, as do the Chinese subsidiary coins; the actual rate depends upon exchange for the day and the particular dollar for which exchange is desired.

PROTECTION AGAINST FLUCTUATION.

There is to the firm engaged in foreign export and import business in China one still greater consideration in regard to the question of exchange, and that has to do with the fluctuations in the relative values of the Chinese silver units in their relation to the Western gold standards. For instance, during the past year (1913) the Mexican dollar value in China varied from 45 to 51 U. S. gold cents in relative values. The lower rate naturally favored the Chinese export trade and the higher rate the import trade.

The foreign firms engaged in import and export business must watch very closely the fluctuations in exchange and, while they may not consider it good business policy to gamble on exchange, still they must be in a position to protect themselves against unfavorable fluctuations in order to do a profitable business.

RAILWAYS AND TRANSPORTATION.

As already related, Tsinanfu is fortunately located, being at the junction of two important railways, with assurances of being served by still other lines. The commercial future of any city in China must be considered in its relation to modern means of transportation. Cities commercially important in the past may not, because of the introduction and expansion of railways in China, remain so in the future, and towns now scarcely on the map commercially will, because of favorable railway connections, jump to positions of great importance with the completion of railways giving them serviceable outlets for native produce.

Tsinanfu will always be an important commercial center. Its position for the future in this regard is assured, for it occupies a pivotal position with respect to the development of northern and southern China. It will not be many years before it will be connected with west China and Turkestan through Taiyuanfu and Kaifengfu.

Railways are already planned to connect the Tientsin-Pukow line at some point a few miles north of Tsinanfu with the Peking-Hankow Railway, probably at Chengtingfu or Shuntefu, with Taiyuanfu in Shansi Province, thus making Tsinanfu an important point in the development of the rich mineral and agricultural resources of north, central, and northwest China, whose populations equal that of our United States.

Likewise, a concession has been granted for the construction of a railway which will connect Kaifengfu, in Honan Province, with Lanchow, the capital of Kansu Province, passing through the rich Wei basin, in Shensi, and destined to tap Turkestan and Mongolia. This railway will cross the Tientsin-Pukow line south of Tsinanfu.

GERMAN CONSTRUCTION—CHEFOO IMPROVEMENTS.

The line from the Tientsin-Pukow Railroad to the Peking-Hankow line is to be constructed by a loan of capital from Germany and by German engineers and with German materials, by virtue of an agreement between China and Germany. The northern section of the Tientsin-Pukow Railroad from the southern borders of Shantung to Tientsin was constructed under a similar arrangement with Germany. The Shantung Railroad connecting Tsinanfu with Tsingtau is a German owned and operated line. The southern end of the Tientsin-Pukow Railroad terminates at Pukow, on the Yangtze River, where accommodations for ocean-going vessels will be constructed, thus making it a direct outlet for foreign trade.

Negotiations are at present being made for the completion of a railway connecting Chefoo, on the Shantung Promontory, with Weihsien, on the Shantung Railroad, and later with Tsinanfu. Breakwater and harbor improvements are planned for Chefoo, which, in connection with the proposed railroad, will make this purely Chinese port an outlet along with Tsingtau for the whole of North and West China, thus again increasing the importance of the position of Tsinanfu as a junction city.

WATERWAY CONNECTIONS—FREIGHT RATES.

Tsinanfu is also reached by a waterway from Chinkiang, on the Yangtze River, through the Grand Canal to its intersection with the Yellow River, which touches within a few miles of Tsinanfu. The Grand Canal and Yellow River route is navigable for flat-bottom boats of small draft only, yet considerable freight finds its way to and out of Tsinanfu over this water route.

The city is also connected with the sea, in the Gulf of Chihli, by a canal with an outlet at Yangchiaokou, a distance of about 140 miles from Tsinanfu. This canal may some day serve an important purpose as a commercial waterway to the sea. At present the canal carries but little cargo for Tsinanfu.

The rates on the Tientsin-Pukow Railroad from Tientsin to Tsinanfu vary from 3 cents Mexican (1½ gold cents) per ton-mile for first-class freight to 0.012 of a cent Mexican (0.006 of a cent gold) per ton-mile for third-class freight. The rates for through freight on the Tsingtau-Tsinanfu line are about the same.

THE FOREIGN COMMERCIAL SETTLEMENT.

Tsinanfu bears the distinction of being the first city in China in which a Foreign Commercial Settlement was voluntarily opened by the Government of China. China took advantage of this fact and drew up a set of regulations, conditional upon which foreign residence may be secured in the Settlement, stipulating among other things, that all lands in this Foreign Settlement must be leased from the Government upon a 30-year term, with option for renewal for an additional 30 years, at a revised rate determined by the general enhanced values of land at that time. The Settlement was opened in January, 1906, and at the time consisted of open fields, the railway station being the only building thereon. There are now 26 foreign-owned (foreign style) buildings and 508 Chinese shops and dwellings. Including the Shantung Railway and mining companies, 11 German and 2 British firms are established here. There are about 200 foreign residents, of whom 118 are Germans, 12 British and 11 Americans. Of the remainder the large majority are Japanese.

Lessees are obliged to build within a year after taking out a lease. All the land in the Settlement is owned by the Government. The Settlement is under the administration of a bureau appointed by the governor of the Province.

Beautiful, wide, well-drained streets, substantially paved and lined with trees and lighted with electricity, make Tsinanfu look like a very modern city. A dozen or more German firms have erected in this Settlement costly business and residential buildings. Owing to the fact that the British Government has as yet not agreed to acquiesce in the acceptance of the regulations governing the residence of foreigners in this Settlement, British firms have not as yet located there. The railway stations of the Tientsin-Pukow and Shantung Railroads are imposing structures, which add much to the beauty of the Settlement. Thousands of Chinese shops, carrying all sorts of foreign and Chinese wares, line the spacious streets of this city, a pleasing contrast to the poorly constructed shops along the narrow streets of the native city of Tsinanfu.

FLOWING SPRINGS—A COLLEGE CENTER

In the southwest suburb of the native city are numerous magnificent clear-water springs gushing from the ground and flowing to a lake in the walled city. Upon the banks of this lake is situated what is probably the most picturesque Chinese Yamen (official residence) in all of China. The waters of these springs also flow into the canal connecting Tsinanfu with the Gulf of Chihli. As the city is the provincial capital, a number of Government schools and colleges are located there, among which is a well-equipped agricultural college.

AMERICAN INTERESTS AT TSINANFU

With the exception of the Singer Sewing Machine Co. and the British-American Tobacco Co., the latter being partially American, there are no American firms located in Tsinanfu. The Standard Oil Co.'s business there is handled through a German agent. However, considerable import and export business is done between Tsinanfu and the United States, but indirectly through German firms.

American residential interests at Tsinanfu are centered in the activity of missionary societies represented there. American missionary hospitals, schools, and colleges are doing an admirable work in and about Tsinanfu. It is a pleasure to find the American and British missionary societies, representing different denominational churches, conducting in Tsinanfu union medical, educational, and religious institutions. Recently the governor laid the corner stone of the Union British-American Missionary Hospital and Medical College, which is to be a beautiful stone building, with accommodations for 150 students and 100 beds for in-patients. The hospital during 1913 treated 31,000 patients. The university of this missionary union, known as the Shantung Christian University, is at present located at Weihsien, on the Shantung Railway. It is soon to be removed to Tsinanfu, where spacious grounds have been secured and where buildings will be erected so soon as the necessary funds have been raised for the purpose. The Young Men's Christian Association, under American direction, is conducting work in Tsinanfu. It hopes soon to be able to erect a building there suitable for its work. There are probably upward of 200 American missionaries engaged in work in Shantung Province. Their labors are appreciated by the people among whom they labor, and this work has done and will continue to do much for American prestige in this Province. The Chinese of Tsinanfu and other parts of the Province are very kindly disposed toward Americans and American interests, due in a large measure to the good labors of missionaries.

OPPORTUNITIES FOR AMERICAN TRADE AT TSINANFU

The only way that American trade interests can be advanced at this important commercial center is by the establishment there of a good substantial American firm with sufficient capital to undertake the business in a large way. As already stated, there are at present a dozen or more German firms established in Tsinanfu engaged in the export and import business. Most of these have not sufficient capital to make their business successful in a large way.

The German firms on the ground will take care of the small business there so that there is no place in Tsinanfu for the little American concern. There is, however, a splendid opportunity for a large American concern, capable of engaging in a general export and import business, having connections in the United States, with a number of large manufacturing and exporting firms. The Chinese Chamber of Commerce of Tsinanfu, during a recent interview, pleaded for the establishment in their city of such an American firm. The whole Chinese public there is distinctly friendly toward Americans, so that an American concern should have no trouble in making proper native connections in this section of China.

In addition to obtaining much of the trade already passing between Tsinanfu and the United States an American firm could secure further markets in the United States for Shantung products and at the same time introduce into the Shantung market American products not already there, as well as extend the sales of those now in the field. The undertaking should be inaugurated by the sending of a good man to Tsinanfu to spend some months in the study of the situation, with the object of ascertaining the nature of the prospective business and the sort of connections which could be effected. The firm should be prepared to do a banking business or at least secure substantial American banking connections in China. It would seem that an organization of a number of American business interests, planned to work in a large way through a number of important commercial centers in China, with establishments at each of the centers, would more nearly accomplish the purpose.

What can be done with American manufactured articles in a country where the people are reputed to have a very low purchasing power is demonstrated by the work of the Singer Sewing Machine Co. in this Province, a district where the masses are said to be poorer than in many sections of China. This company, 10 years ago, with its business in the hands of foreign agents, sold less than 100 machines a year. To-day, with its own organization in the field, its yearly sales number 2,000. This instance illustrates well the difference between a firm's having its own organization in the field and intrusting its products to the hands of agents.

MERCHANDISE WHICH MIGHT FIND A MARKET

American hardware, mining machinery, building materials, industrial machinery, certain farming implements, kerosene and gasoline engines, railway materials, bicycles, laboratory apparatus and supplies, drugs and toilet articles, canned milks and certain tinned provisions, dried fish, piece goods, cotton threads, needles, etc., are among American products which may find a market in China and in Shantung. During the past year Tsinanfu imported about 2,000 jinrikshas with low, nickel-plated, ball-bearing, pneumatic rubber-tired wheels, for use in local traffic. The wheels were imported from abroad. These vehicles are each equipped with two lamps and a bell or horn. A coal-mining company in southern Shantung imported during the past year 200 railway trucks, 2 Baldwin locomotives, and considerable modern mining machinery. A considerable amount of weaving machinery was imported into Tsinanfu during 1913. Industrial plants are likely to spring up in this important trade center so soon as native capital and industry can feel sure of adequate protection. These will require foreign machinery. In the export trade peanuts, peanut oil, beans, straw braid, silks, eggs, albumen, hides, skins, tallow, walnuts, hemp, etc., are among the products which find a market in America.

In the opinion of these acquainted with local conditions there is in Tsinanfu a splendid opportunity for American import and export trade on a large scale, provided it is undertaken by a concern with sufficient capital to do it in a big way. The time is opportune for the inauguration of such an undertaking along the lines laid down.

SHARK FISHING ON ASIATIC COAST.

The Manchuria Marine Products Co. experimented upon the use of goose fish nets for "guchi" fishery off the Hsiung-yocheng coast last season, and also the use of cod-fishing boats about the Elliot group. The former experiment turned out well and the same kind of nets are being employed in "guchi" fisheries in Korean waters. The exact results of the latter experiment are unknown, but that it was anything but a failure has been well established.

The company is now planning to try shark fishing in the sea area 60 miles long stretching from Ento Island to Shantung promontory. It will dispense with sailors altogether and intends to rent the depot boat *Kwansui Maru* from the Kwangtung Marine Products Union and to equip it with a device to manipulate the cork lines of the nets. This new fishing method has several advantages, one of which is the increase of working hours. This advantage is much valued, especially because the season runs only for the two months of July and August.

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Cia. General de Tabacos
Shewan, Tomes & Co.
Stevenson & Co., Ltd.

Shipbuilding and Repairs
Fiat-san Giorgio Ltd.
Tsingtauer Werft
Hongkong & Whampoa Dock Co., Ltd.
Mitsu Bishi Dock and Engineering Works
Shanghai Dock and Engineering Co., Ltd.
The Taikoo Dockyard and Engineering Company of Hongkong, Limited

Steamship Companies
Cia. General de Tabacos
Pacific Mail S. S. Co.
Ynchausti & Co.
Toyo Kisen Kaisha.

Steel Manufacturers
United States Steel Products Export Co.

Steel Works
Bohler Bros. & Co., Ltd.
U. S. Steel Products Co.

Stokers
Babcock & Wilcox Ltd.

Structural Steel
Bohler Bros. & Co.
Shanghai Dock & Engineering Co., Ltd.
U. S. Steel Products Co.

Sugar Machinery
A. F. Craig & Co.

Superheaters
Babcock & Wilcox Ltd.

Tanks
Pacific Tank and Pipe Co.
Shanghai Dock & Engineering Co., Ltd.
U. S. Steel Products Co.
A. F. Craig & Co.

Telephones
The Western Electric Co.

Textile Machinery
A. F. Craig & Co.

Tiles and Bricks
Green Island Cement Co., Ltd.
Chinese Eng. Mining Co.

Tobacco Dealers
British-American Tobacco Co., Ltd.
Cia. General de Tabacos
Olsen & Co., Walter E.

Tools
American Tool Works Co.
Lodge & Shipley Machine Tool Co.
Shanghai Machine Co.
Shanghai Dock & Engineering Co., Ltd.

Windmills
Defiance Machine Works.

Water Softeners
Babcock & Wilcox Ltd.

Wood Working Machinery
American Tool Works Co.
Defiance Machine Works.
Lodge & Shipley Machine Tool Co.
Shanghai Dock & Engineering Co., Ltd.